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Phase 2 Extended Site Investigation for Site 9- Electronic

Counterneasures (ECM) Area

Naval Weapons
Industrial Reserve Plant
Calverton, New York



Northern Division
Naval Facilities Engineering Command
Contract Number N62472-90-D-1298
Contract Task Order 0270

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PHASE 2 EXTENDED SITE INVESTIGATION FOR SITE 9 - ELECTRONIC COUNTER MEASURES

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT **CALVERTON, NEW YORK**

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

> Submitted to: **Northern Division Environmental Branch Code 18 Naval Facilities Engineering Command** 10 Industrial Highway, Mail Stop #82 Lester, Pennsylvania 19113-2090

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ACRONYMS

bgs below ground surface

bwt below water table

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CF Braun Engineering Corporation

CLEAN Comprehensive Long-term Environmental Action Navy

CMS Corrective Measures Study

CTO Contract Task Order

DOH New York State Department of Health

ECM Electronic Countermeasures

EPA United States Environmental Protection Agency

ESI Extended Site Investigation

FS Feasibility Study

ft/day feet per day

GOCO Government-Owned Contractor-Operated

GW Groundwater

HNUS Halliburton NUS

HSA Hollow Stem Auger

IAS Initial Assessment Study

IR Installation Restoration

MCL Maximum Contamination Limit

MCLG Maximum Contaminant Level Goal

msi mean sea level

NAVFAC Navel Facilities Engineering Command

Navy United States Department of Navy

NCP National Oil and Hazardous Substances Contingency Plan

NYSDEC New York State Department of Environmental Conservation

NWIRP Navai Weapons Industrial Reserve Plant

PA Preliminary Assessment

RCRA Resource Conservation and Recovery Act

RI Remedial Investigation

RFA RCRA Facility Investigation - Sampling Visit

RFI RCRA Facility Investigation

SI Site Investigation

TAGM Technical and Administrative Guidance Memorandum

TCA 1,1,1-trichloroethane

TCL Target Compound List

TtNUS Tetra Tech NUS, Inc.

 μ g/L microgram per liter

USDOI U.S. Department of the Interior

USEPA U.S. Environmental Protection Agency

VOC Volatile Organic Compound

1.0 INTRODUCTION

1.1 PURPOSE

The Northern Division of the Naval Facilities Engineering Command (NAVFAC) has issued Contract Task Order (CTO) 0270 to Tetra Tech NUS, Inc. (TtNUS) under the Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract N62472-90-D-1298 to perform a Phase 2 Extended Site Investigation for Site 9 - Electronic Counter Measures (ECM) Area at the Naval Weapons Industrial Reserve Plant (NWIRP), located in Calverton, New York.

This work is part of the Navy's Installation Restoration (IR) Program, which is designed to identify contamination of Navy and Marine Corps lands/facilities resulting from past operations and to institute corrective measures, as needed. There are typically four distinct stages. Stage 1 is the Preliminary Assessment (PA), which was formerly known as the Initial Assessment Study (IAS). Stage 2 is a RCRA Facility Assessment -Sampling Visit (RFA), which is also referred to as a Extended Site Investigation (ESI), which augments the information collected in the Preliminary Assessment. Stage 3 is the RCRA Facility Investigation/Corrective Measures Study (RFI/CMS) (also referred to as a Remedial Investigation/Feasibility Study [RI/FS]), which characterizes the contamination at a facility and develops options for remediation of the site. Stage 4 is the Corrective Action, which results in the control or cleanup of contamination at sites. This report has been prepared under Stage 2 and serves as a supplemental report to the RFA report and RFA Addendum for NWIRP Calverton, New York, (Halliburton NUS [HNUS], 1995 and CF Braun 1996).

This report specifically addresses Site 9, the ECM Area. In addition to Site 9, Phase 2 Remedial Investigations are continuing at several other IR sites. The results from the investigation at the other sites will be presented in supplemental Phase 2 reports.

This Extended Site Investigation (ESI), which is analagous to a Phase 2 RCRA Facility Assessment (RFA), was conducted in accordance with the requirements of the New York State Department of Environmental Conservation Division of Solid & Hazardous Materials Part 373 Permit that was issued to the Navy on April 18, 2000 under their implementing Regulations (6NYCRR Part 621). This permit supersedes and replaces the original Part 373 Permit to Operate a Hazardous Waste Storage Facility that was issued to the then Grumman Aerospace Corporation on March 25, 1992. The new permit, issued only to the Department of Navy, deals exclusively with those Solid Waste Management Units (SWMUs) that remain on the former NWIRP Calverton property and any Corrective Actions that may be required in order to adequately address each IR Site. Although the Part 373 Permit is the enforceable document governing the Navy's remedial actions, the NYSDEC State Superfund group, located out of the Albany

office, retains primary responsibility for regulatory oversight of the Navy's actions. As such, the Navy has agreed to a request made by the NYSDEC State Superfund group to utilize terminology associated with NYSDEC's State Superfund program which is closely related to the Federal CERCLA program. The CERCLA terminology that is to be used parallels the RCRA terminology and the implementation phases of each have been determined to meet the substantive requirements of both programs and will also satisfy the Corrective Action requirements set forth in Module III of the Part 373 Permit.

1.2 FACILITY LOCATION

The site involved in this study is located within the confines of NWIRP Calverton, Suffolk County, New York, (see Figure 1-1 and Figure 1-2). NWIRP Calverton is located on Long Island approximately 70 miles east of New York City. The facility is located within the municipality of Riverhead.

Prior to 1996, NWIRP Calverton was a government-owned contractor-operated (GOCO) facility which was operated by the Northrop Grumman Corporation. The facility had an overall area of approximately 6,000 acres, of which 3,000 acres lie entirely within a fenced-in boundary. The majority of the industrial activity was confined to the south central portion of this fenced-in area.

Currently, NWIRP Calverton consists of four separate parcels of land totaling approximately 358 acres. Eight Navy IR sites are included within these parcels as follows. The location of the parcels and sites are presented in Figure 1-2.

Parcel A (32 acres)

Site 2 - Fire Training Area

Parcel B1 (40 acres)

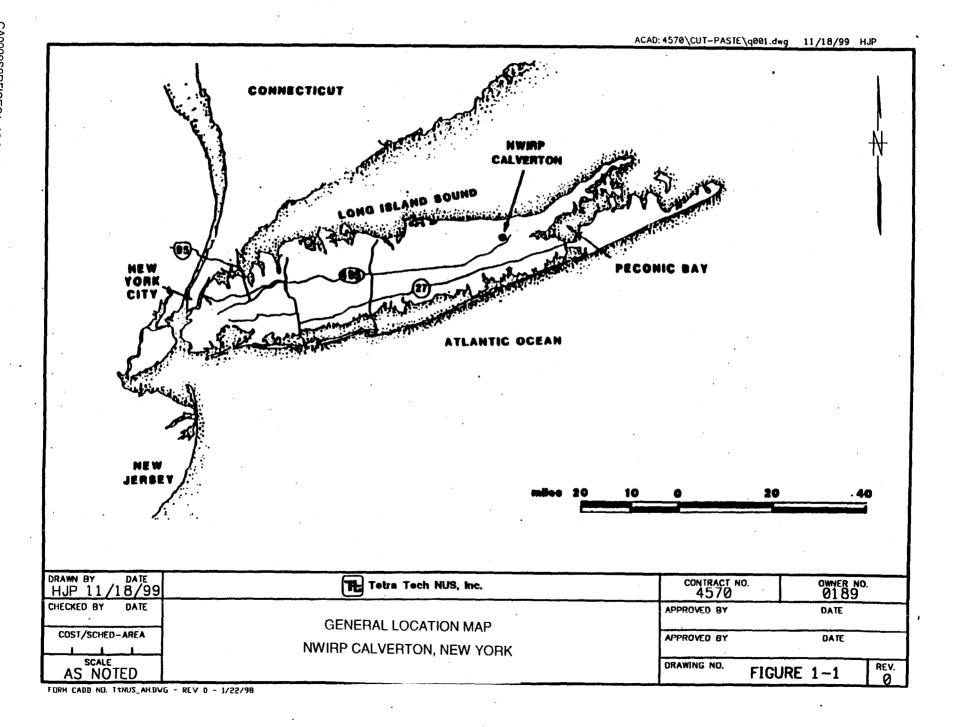
Site 6A - Fuel Calibration Area Site 10B - Engine Test House

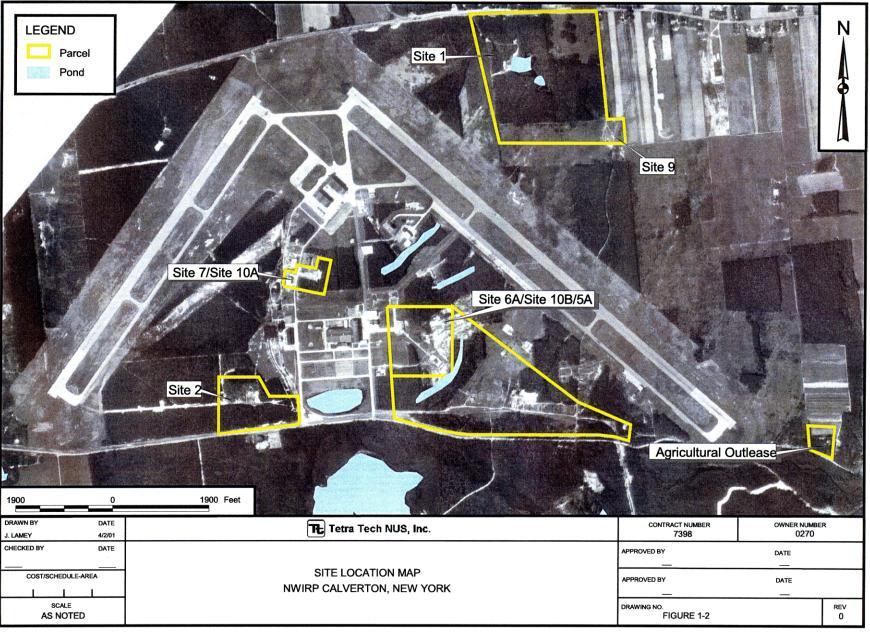
Parcel B2 (131 acres)

Southern Area

Parcel C (10 acres)

Site 7 - Fuel Depot Site 10A - Jet Fuel Systems Laboratory





Parcel D (145 acres)

Site 1- Northeast Pond Disposal Area Site 9 - ECM Area

1.3 FACILITY HISTORY

NWIRP Calverton has been owned by the U.S. Department of the Navy (Navy) since the early 1950's, at which time the land was purchased from a number of private owners. The facility was expanded in 1958 through additional purchases of privately-owned land. Northrop Grumman Corporation (previously Grumman Corporation) leased the land and was the sole operator of the facility from its construction until February 1996. In 1996, the land was returned to the Navy.

In September 1998, the majority of the land within the developed section of the facility was transferred to the Town of Riverhead for redevelopment. Because of the need for additional environmental investigation and the potential need for remediation, the Navy retained four parcels of land within the developed section. The four parcels and associated Navy IR Sites are presented on Figure 1-2.

Approximately 3000 acres of undeveloped land outside of the fenced area were transferred to the Veterans Administration (140 acres) and the New York State Department of Environmental Conservation in 1999 (approximately 2,860 acres).

NWIRP Calverton was constructed in the early 1950's for use in the development, assembly, testing, refitting, and retrofitting of Naval combat aircraft. The facility supported aircraft design and production at the Northrop Grumman's Bethpage facility, which is located in Nassau County, New York.

The majority of industrial activity at the facility was confined to the developed area in the center and south center of the facility, between the two runways. Industrial activities at the facility were related to the manufacturing and assembly of aircraft and aircraft components. Operations which resulted in hazardous waste generation included but were not limited to metal finishing processes, such as metal cleaning and electroplating, other maintenance operations, temporary storage of hazardous waste, fueling operations, and various training operations. The painting of aircraft and components resulted in additional waste generation.

1.4 SURFACE WATER HYDROLOGY

The majority of the NWIRP Calverton is located within the Peconic River drainage basin. The eastward-flowing Peconic River is located approximately 1,300 feet south of the facility at its closest point. The Peconic River discharges to Peconic Bay located 8.5 stream miles from the facility.

Major surface water features near the facility include McKay Lake and Northeast Pond (see Figure 1-2). McKay Lake is a man-made groundwater recharge basin located north of River Road, midway along the southern site border. Northeast Pond is located at the northeast corner of the facility. Several small drainage basins exist near the Fuel Calibration Area (Runway Ponds). All of these surface water features are land locked, with the exception of McKay Lake, which has an intermittent discharge to Swan Pond, located 1,500 feet to the south of NWIRP Calverton. Overhead flow from the drainage basins to the Peconic River may also occur periodically.

A number of small wetlands exist on the Calverton facility. The U.S. Department of the Interior (USDOI), Fish and Wildlife Department classifies the western half of the 2-acre Northeast Pond as palustrine, forested/scrub/shrub/emergent wetland. The drainage basins are classified as palustrine, scrub/shrub/emergent wetland (USDOI, 1980).

1.5 HYDROGEOLOGY

The unconsolidated sediments that underlie NWIRP Calverton are generally coarse-grained with high porosities and permeabilities. These factors create aquifers with high yields and transmissivities.

The Upper Glacial Formation, the Magothy Formation, and the Lloyd Sand are the major regional aquifers. The Upper Glacial and Magothy aquifers are of principle importance in Suffolk County because of their proximity to the ground surface. The Raritan Clay of the Raritan Formation has a very low permeability and acts as a regional confining layer that is believed to minimize the local risk of contamination to the underlying Lloyd Sand aquifer (McClymonds and Frank, 1972). The Lloyd Sand has not been extensively developed due to its depth and the abundant water available in the overlying aquifers.

The Upper Glacial aquifer is widely used as a source of groundwater in Suffolk County. The water table beneath the NWIRP Calverton lies within this aquifer. Porosities in excess of 30 percent have been calculated for the Upper Glacial aquifer in adjoining Nassau County. Hydraulic conductivity is estimated at 270 feet per day (ft/day).

The Magothy aquifer is widely used as a source of groundwater in Suffolk County. The most productive units are coarser sand and gravel. The permeability of the Magothy is high and hydraulic conductivity has been calculated in excess of 70 ft/day.

The Upper Glacial and Magothy aquifers are believed to be hydraulically interconnected and to function as a single unconfined aquifer. Logs from on-site monitoring wells, previous hydrogeologic investigations, and geologic mapping indicate that although clay lenses that may create locally confining and/or perched conditions are present in both aquifers, these lenses are not widespread and do not function as regional aquitards (McClymonds and Frank, 1972; Fetter, 1976).

NWIRP Calverton straddles a regional groundwater divide, with groundwater beneath the northern half of the facility flowing to the northeast, with the Long Island Sound as the probable discharge point for groundwater in the shallow aquifer zones. Groundwater beneath the southern half of the facility flows to the southeast and the Peconic River basin is the likely discharge point. Groundwater on the divide, the location of which can fluctuate, flows to the east.

1.6 GENERAL ECOLOGICAL SETTING OF NWIRP CALVERTON

NWIRP Calverton is located in the Long Island Pine Barrens, an area characterized by forests dominated by pitch pine (*Pinus rigida*) and oaks (*Quercus* sp.) growing on coarse-textured upland soils. Rainfall leaches rapidly through the soils recharging a vast underlying aquifer but creating a dry environment at the surface which predisposes the vegetation to frequent periodic wildfires. Where the frequent fire cycle is intact, the forest is typically dominated by pitch pine with a dense understory of scrub oak (*Quercus ilicifolia*), a shrub oak that rarely grows taller than 20 feet. Pitch pine is thick barked and thus generally resistant to brief fires, and both pitch pine and scrub oak regenerate rapidly following heavier fires (Myers and Gaffney, 1990; Navy, 1986).

Dominance by taller oaks; especially scarlet oak (*Quercus coccinea*), white oak (*Quercus alba*), and black oak (*Quercus velutina*); increases where the fire cycle has been suppressed by human activity. A successional sequence progressing from a pitch pine-shrub oak forest, to a pitch pine-oak forest (taller oaks), and then to an oak-pitch pine forest (taller oaks) is recognized when fire is excluded (Myers and Gaffney, 1990). Fire has generally been excluded from inside the NWIRP Calverton fence since its establishment in 1952, and most mature forest within the fence cover falls into the pitch pine-oak or oak-pitch pine classifications. Especially in the northern part of the fenced area, where soils are less coarse, much forest cover is dominated by oaks, and pitch pine is only a minor associate.

Also typical of the Long Island Pine Barrens are coastal plain ponds, isolated shallow ponds with fluctuating levels of acidic, tea-colored water. These ponds are typically fringed by emergent wetland

communities dominated by various rushes, sedges, and forbs and known to support a variety of rare, threatened, and endangered species (Myers and Gaffney, 1990; Conrad, 1996). The fenced part of NWIRP Calverton contains several coastal plain ponds, including Northeast Pond, Shannon's Pond immediately south of Northeast Pond, North Pond, and three narrow ponds on the edge of the developed area termed the Runway Ponds. Most of these ponds, especially Northeast Pond and the Runway Ponds, have been hydrologically altered by human activity. Also, one man-made lake (McKay Lake) is present in the south central portion of the facility.

1.7 PREVIOUS INVESTIGATIONS

Previous investigations at the site consisted of the following:

- IAS (Navy, 1986)
- SI (HNUS, 1992a)
- RFA (HNUS 1995)
- RFA Addendum (CFBraun, 1997a)

This report has been prepared to supplement the NWIRP Calverton RFA Addendum report issued in 1997, (CFBraun, 1997a). Results from previous investigations are presented in Section 2.2. The RFA report concluded that additional testing was necessary to confirm nature and extent of contamination at several sites. At Site 9 – ECM Area, specific data gaps from the previous work are identified in the site-specific sections of this report. Low-level VOC contamination was detected at the Navy's eastern boundary as well as in wells located on property adjacent and downgradient from the ECM Area. This led to a data gap being identified that the extent of this low-level VOC plume was not adequately defined, especially on off-site property.

The Phase 2 ESI testing program was presented in the Phase 2 RFI Field Sampling Plan (CF Braun 1997b) and incorporates comments from the NYSDEC, New York State Department of Health (DOH), The Nature Conservancy, Suffolk County Department of Health Services, and the USEPA, Region II.

1.8 SUMMARY OF FIELD ACTIVITIES

Field activities conducted during the Phase 2 ESI are summarized as follows. A detailed description of field activities is presented in Section 3.0 of this report.

- Two permanent onsite groundwater monitoring wells were sampled and analyzed for cadmium in 1997.
- Eleven offsite temporary monitoring wells were installed in 2000. Groundwater was sampled at depth and analyzed for volatile organic compounds (VOCs) analysis.
- Two permanent onsite groundwater monitoring wells were sampled and analyzed for VOCs in 2000.

1.9 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) SAMPLES

Groundwater samples were analyzed by Ecotest (48-hour turnaround time) for VOCs in 2000, Quanterra, Inc. for cadmium in 1997, and Severn Trent Laboratories for Target Compound List (TCL) VOCs in 2000. Analytical results, analytical methods, and data qualifiers are presented in Appendix A.

The Ecotest and Severn Trent Laboratories data were evaluated based upon trip blank contamination. No detections were noted in the trip blanks. Only three positive detections of chemicals were noted in the current data set. 1,1,1 Trichloroethane (TCA) was detected in one sample. TCA is a known site contaminant. Acetone and carbon dissulfide were detected in one sample each. Acetone is a common laboratory contaminant and carbon disulfide is sometimes a laboratory contaminant. these chemicals have not been identified as site contaminants.

2.0 SITE BACKGROUND

2.1 SITE DESCRIPTION/ENVIRONMENTAL SETTING

The Electronic Counter Measure (ECM) Area is located in the northeast corner of the NWIRP, Calverton, (See Figure 1-2). This area was constructed in the early 1970's and was used into the early 1990s for testing and evaluating electronic equipment. 1,1,1-Trichloroethane (TCA) was used as a solvent/cleaning agent in the ECM laboratory.

General features at the site formerly included the ECM building (Building 07-39), an old debris disposal area located approximately 600 feet to the south, and two depressions located to the east and to the southeast, (See Figure 2-1). In approximately 1996, the ECM building was demolished and equipment in the surrounding area removed. Currently, the area is an open field.

Located east of the ECM Area is the property fence line. Beyond the fence line, an experimental sod farm program was conducted in the late 1980s to early 1990s. The program consisted of growing sod using municipal solid waste compost to amend the natural soils and provide nutrients. As part of this experimental program, a series of monitoring wells (MW1 to MW7) were installed and monitored by the Suffolk County Department of Health. TCA at a concentration of 190 ug/l was detected in the well furthest from the ECM area (MW-7) in the early 1990s. Monitoring wells closer to the site exhibited lower concentrations of chemicals.

In 1999, ownership of the property adjacent to the Navy's ECM Area changed and the property is now used for sand mining operations. The topography has been significantly changed with some areas being used as a borrow pit and other areas used for stockpiling of soils.

2.2 PREVIOUS INVESTIGATIONS

The investigation at the ECM area was initiated at the request of the Suffolk County Department of Health. TCA and related compounds were detected in samples collected from the offsite wells. Groundwater flow patterns indicated that the ECM area is up gradient of the groundwater contamination and could be a potential source of the contamination. In addition, TCA was used in the ECM laboratory. Workers reported that fresh TCA was stored in a 55-gallon drum on the east side of the plant and that waste TCA was placed in shallow pan outside the east door of the building and allowed to evaporate. The workers reported that approximately 10 gallons per year of TCA were used in the laboratory operations.

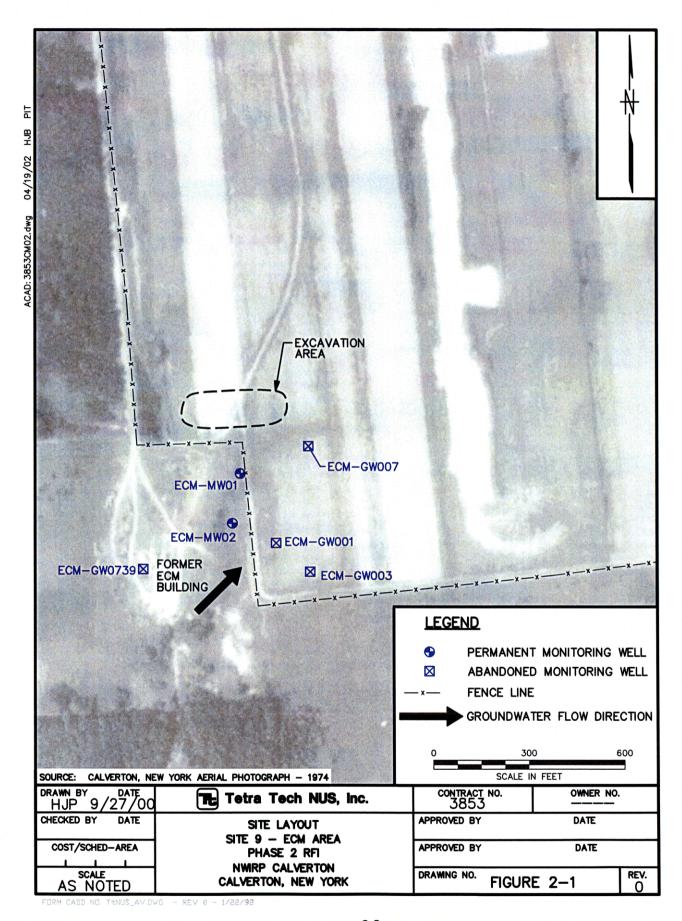
Based on the above, an RFA was conducted in the 1994/1995 timeframe (HNUS, 1995). This assessment found TCA in onsite monitoring wells and confirmed TCA in the offsite county monitoring wells. Analytical results are summarized in Figure 2-2. However, based on the concentration detected in the on site wells relative to off site wells, the 1995 RFA report concluded that the ECM area was not a likely source and, at best, was not a continuing source of the off site contamination due to Northrop Grumman ceasing operations at the ECM Area in anticipation of vacating the Navy's property.

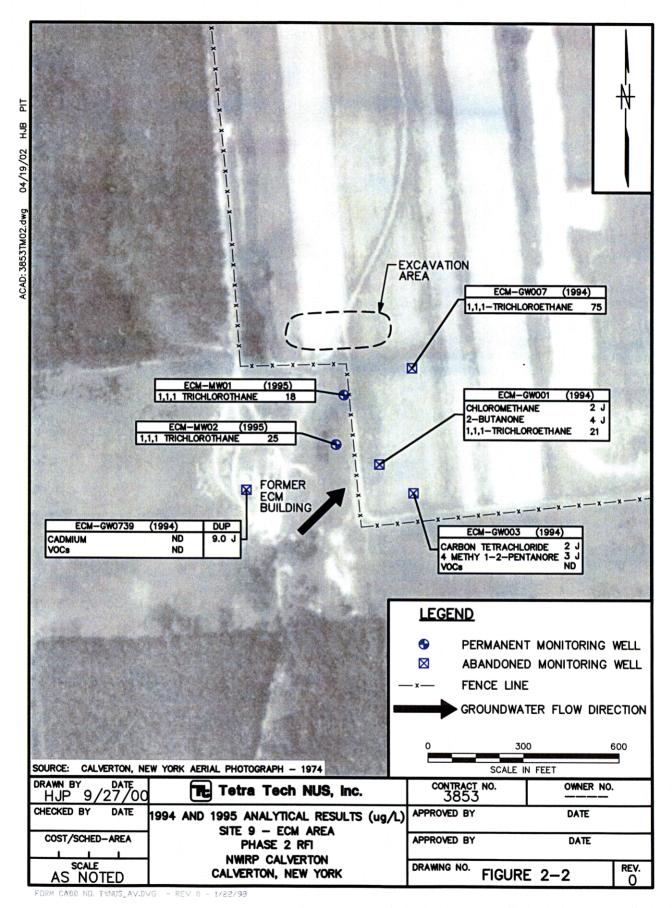
Trace levels of non-halogenated organic chemicals were detected in onsite soil samples. However, the concentration of the detected chemicals were below relevant criteria and these chemicals were not detected in off site groundwater.

Two data gaps were identified in the 1995 RFA report. One data gap was that cadmium was detected in the on site groundwater supply well at a concentration slightly greater than drinking water standards (a nondetect result and a duplicate result of 9.0 ug/l versus a standard of 5 ug/l). Based on the site history, there is no reason to suspect cadmium as a site related contaminant. However, supplemental testing was required to better define whether cadmium was actually present at the site, and if present at environmentally significant concentrations. In the interim, the water supply well was abandoned in 1996 when the ECM area was demolished.

The second data gap was to further delineate the nature and extent of offsite VOC groundwater contamination. The historic data that showed that the most contaminated groundwater was furthest from the site.

To better define whether the TCA originated from the ECM Area, six temporary monitoring wells were installed in November and December 1995 along the fence north and east of the ECM laboratory. TCA was detected in five of the six wells, and at a maximum concentration 35 ug/l. These findings provided evidence that the ECM Area was a possible source of the TCA contamination. To confirm the temporary monitoring well results, two permanent monitoring wells were installed in this area (ECM-MW01 and MW02) and sampled for VOCs. TCA was detected in these permanent monitoring wells at concentrations of 18 and 25 ug/l. This data is detailed in the RFA Addendum (CF Braun 1997a). Data from the permanent (current and abandoned) monitoring wells is presented in Figure 2-2.





In 1997, a Phase 2 RFI Field Sampling Plan (CF Braun 1997b) was prepared to address the data gaps at Site 9, as well as for other facility sites. However, the Navy could not obtain access to the offsite property adjacent to the ECM area and as a result, the offsite groundwater investigation was delayed. In 2000, access to the property through a new property owner was obtained. In addition, instead of the six proposed temporary monitoring wells, ten temporary monitoring wells were proposed in a work plan addendum (TtNUS, 2000). During the field program, one of the ten wells could not be installed because of site activities, but two additional wells were also added to the program. The results of this investigation are presented in Section 4.0 of this report.

2.3 GEOLOGY

During the 1995 RFA, eight soil borings (ECM-SB01 - ECM-SB08) were installed. The borings were advanced to the water table using hollow-stem drilling techniques. Soils throughout the area were described primarily as fine to medium grained sand with sub-round to round pebbles from the ground surface to the bottom of the boring.

2.4 HYDROGEOLOGY

Based on the soil borings drilled at the ECM Area, the water table was encountered at a depth of approximately 25 to 44 feet below ground surface. Based on regional groundwater measurements conducted in 1997, groundwater flow in this area is to the northeast. The average groundwater gradient at this site is approximately 0.15 percent. Groundwater seepage velocities are estimated to be 27 feet per year in the deeper aquifer to 270 feet per year in the shallow aquifer.

3.0 INVESTIGATION SUMMARY

Field work was conducted at the Site 9 - ECM Area as part of the Phase 2 Extended Site Investigation (ESI). The field work consisted of sampling two onsite permanent monitoring wells in 1997 (two rounds) and in 2000 (one round), and the installation and sampling of eleven offsite temporary monitoring wells in 2000. The field work was conducted in accordance with the Phase 2 RCRA Facility Investigation Field Sampling Plan in 1997 (CF Braun 1997b) as amended by the Work Plan Addendum in 2000 (TtNUS, 2000).

3.1 PERMANENT MONITORING WELL SAMPLING

Two permanent monitoring wells are located in the northeast corner of the ECM Area (ECM-MW01 and MW02), see Figure 3-1. Both of these wells are screened across the water table. Based on groundwater flow mapping, with groundwater flowing to the northeast, these wells would be located hydraulically down gradient of the former ECM building/laboratory.

These wells were sampled twice in 1997 for cadmium and once in 2000 for TCL VOCs. The wells were sampled by low flow sample techniques, via a variable speed submersible pump. Groundwater sample log sheets, monitoring well purge records, and chain of custody forms are presented in Appendix A. Analytical results are presented in Section 4.0.

In addition, one onsite groundwater extraction well and seven offsite permanent monitoring wells (shown as abandoned) were present in the immediate area. ECM-GW0739 was a low-capacity (gpm range) production well for building use, which was abandoned in 1996 when the building was demolished. Monitoring wells ECM-GW001 to GW007 were located on the adjacent property east of the ECM Area. Three of the wells (ECM-GW001, 003, and 007) were sampled in 1994 by the Navy to confirm previous findings and are shown on Figure 3-1. The balance of the off site permanent wells were in the same general area as these three wells, in a "L" shape starting at ECM-GW001 and ending at ECM-GW007. Excavated soils are currently being stockpiled in this area. Therefore, it is likely that these offsite permanent monitoring wells have been lost.

3.2 TEMPORARY GROUNDWATER MONITORING WELLS

Eleven temporary groundwater monitoring wells were installed and sampled in 2000, see Figure 3-1. The wells were installed in three stages, consisting of 5 wells in June 2000 (ECM-TW07 to TW11), 4 wells in July 2000 (ECM-TW12 to TW15), and 2 wells in August 2000 (ECM-TW20 and

TW21). The locations for the second and third stage wells were based on the results of the previous stages.

Sample designations and depths are provided in Table 3-1. The temporary monitoring well samples were analyzed for Volatile Organic Compounds (VOCs) with 48 hour turnaround times by Ecotest Laboratories Incorporated. Groundwater sample log sheets, monitoring well purge records, and chain of custody forms are presented in Appendix A. Analytical results are presented and discussed in Section 4.0.

The temporary well borings were completed by Delta Well & Pump Incorporated using hollow stem auger (HSA) drilling techniques. Two techniques were used for collecting the groundwater samples, one using temporary well casing and the second using direct push technology (DPT). Groundwater samples were collected from temporary monitoring well ECM-TW07 using the temporary well casing procedure. Based on the time required using a temporary well casing, the DPT procedure was first used on the next boring, and then based on the success in this boring, was used on the remaining borings in the ECM area. Groundwater sample collection details are presented below.

ECM-TW07 was first augered to the total depth of the boring and then a 2-inch diameter well screen and riser pipe was installed inside the augers to the bottom of the boring. The augers were then retracted 5-feet to allow the boring to collapse around the well screen. At this point a submersible pump was lowered into the well screen and the appropriate volume of groundwater was extracted in order to purge the well. The sample was collected directly from the pump outlet. The well casing was removed from the boring and decontaminated. The augers were retracted to five below the water table and then the well casing reinstalled. The pump was again lowered into the well, the well purged, and then a sample collected.

The balance of the groundwater samples (ECM-TW08 through TW13, TW20, and TW21) were collected from temporary well borings using DPT and Hydropunch. The samples were collected on the way down through the boring. At each well point, HSA drilling was completed to a depth approximately 5-feet above the desired sample interval. At this point, the Hydropunch sampler was installed inside the HSAs and driven by a down-hole hammer to a depth 4 to 5-feet below the lead auger. The Hydropunch was then pulled back 1-foot to expose the perforated sample barrel. The sampler was then allowed to sit for approximately 20 minutes to allow sufficient time for groundwater to accumulate in the sampler. The Hydropunch was then removed from the borehole for sample collection. Samples were collected directly from the Hydropunch sampler.

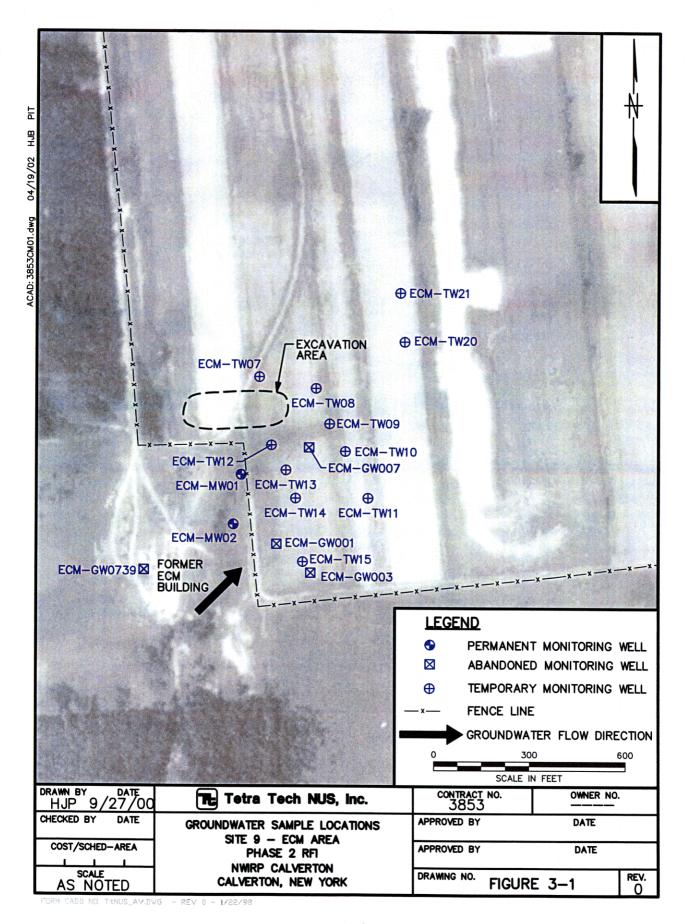


TABLE 3-1
SUMMARY OF FIELD SAMPLING PROGRAM
PHASE 2 RFI, NWIRP CALVERTON, NEW YORK

Well Location	Sample Number	Sample Depths (ft/bgs)		
ECM-TW07	ECM-TW07-01-20	55 to 60		
	ECM-TW07-02-05	40 to 45		
ECM-TW08	ECM-TW08-01-05	43 to 44		
	ECM-TW08-02-20	58 to 59		
ECM-TW09	ECM-TW09-01-05	43 to 44		
2011111111	ECM-TW09-02-20	58 to 59		
ECM-TW10	ECM-TW10-01-05	43 to 44		
	ECM-TW10-02-20	63 to 64		
ECM-TW11	ECM-TW11-01-05	48 to 49		
20	ECM-TW11-02-20	63 to 64		
ECM-TW12	ECM-TW12-01-35	34 to 35		
20111 1111	ECM-TW12-02-50	49 to 50		
ECM-TW13	ECM-TW13-01-35	34 to 35		
201111111	ECM-TW13-02-50	49 to 50		
ECM-TW14	ECM-TW14-01-49	48 to 49		
	ECM-TW14-02-64	63 to 64		
ECM-TW15	ECM-TW15-01-42	41 to 42		
	ECM-TW15-02-57	56 to 57		
	ECM-TW15-03-00	56 to 57 (duplicate		
		of TW15-02-57)		
ECM-TW20	ECM-TW20-45-01	44 to 45		
	ECM-TW20-60-01	59 to 60		
•	ECM-TW20-80-01	79 to 80		
	ECM-TW20-100-01	99 to 100		
	ECM-TW20-120-01	119 to 120		
ECM-TW21	ECM-TW21-45-01	44 to 45		
	ECM-TW21-60-01	59 to 60		
	ECM-TW21-80-01	79 to 80		
	ECM-TW21-100-01	99 to 100		
	ECM-TW21-130-01	129 to 130		
ECM-MW01	ECM-MW01-0007	. 40		
ECM-MW02	ECM-MW02-0007	42		

Ft bgs: Feet below ground surface.

All samples were collected as per the site work plan and Tetra Tech NUS (TtNUS) Standard Operating Procedures (SOPs). When sufficient sample volume was available, field parameters were recorded as noted on the groundwater sample logsheets. Boring and sampling activities were frequently monitored with a Photo-ionization-Device (PID) and readings were also recorded on the sample logsheets. Boring logsheets were completed for each temporary well point. However, the subsurface descriptions were completed by observing the soil cuttings brought to the surface by the HSAs and, due to smearing, may no be accurate. All purge water was collected and transported to the NWIRP Calverton site for temporary storage. All drilling cuttings were spread out at the associated temporary well point. Upon temporary well completion, all borings were backfilled with cement/bentonite grout slurry using tremie pipes from the bottom of the boring to the ground surface.

4.0 NATURE AND EXTENT OF CONTAMINATION

4.1 ANALYTICAL RESULTS

The ECM area was investigated as a potential source of 1,1,1-trichloroethane (TCA) contaminated groundwater found in an offsite area. In addition, low levels of cadmium may be present in on site groundwater. The results of the current groundwater investigation are presented in Table 4-1. Sample log sheets and chain of custody are provided in Appendix A and laboratory data sheets are presented in Appendix B.

In 1997, on site permanent monitoring wells were sampled to determine if there is significant cadmium groundwater contamination present at the site. The cadmium investigation was conducted because in 1995, a water supply well at the site was tested for metals. Cadmium was detected in a QA/QC sample (duplicate) at approximately twice drinking water standard, but was not detected in the original field sample. Therefore, based on the 1995 data, the presence and concentration of cadmium in the groundwater well was uncertain. Since this potable water supply well was abandoned in 1996 and could not be reevaluated, the two nearest down gradient groundwater monitoring wells were selected for further evaluation. These two monitoring wells were sampled twice, once in June and once in November 1997. Cadmium was not detected in either well during either sample event.

Since off site property access could not be obtained in 1997, evaluation of the VOC-contaminated groundwater was not conducted at that time. Rather, the Navy continued to negotiate with the property owner for access. In 2000, the property changed hands, and property access was granted. In the summer of 2000, groundwater samples were collected as follows, (see Figure 3-1).

- Two shallow permanent monitoring wells located in the ECM area were sampled.
- Nine near offsite temporary monitoring wells were sampled at depths of 5 and 20 feet below the water table (maximum total depth of 64 feet). These wells were located 90 to 400 feet from the ECM area.
- Two far offsite temporary monitoring wells were sampled at depths of 5, 20, 40, 60, and 80 to 90 feet below the water table (maximum total depth of 130 feet). These wells were located over 1000 feet from the ECM Area.

During the 2000 investigation, 30 groundwater samples were collected. TCA, acetone, and carbon disulfide were detected in one well each, see Figure 4-1. TCA was detected at a concentration of 2 ug/l in ECM-TW20, which is less than the New York state drinking water standard of 5 ug/l and the Federal

drinking water standard of 200 ug/l. Acetone and carbon disulfide were detected at concentrations of 18 ug/l and 7 ug/l, respectively, which are also below the drinking water standard of 50 ug/l in New York. In addition, the detections of acetone and carbon disulfide are likely to be laboratory contaminants and may not be present in the site groundwater.

In 1995, temporary onsite monitoring wells near the fence line contained TCA at concentrations up to 35 ug/l and the two onsite permanent monitoring wells were measured to contain TCA at concentrations of 18 ug/l and 25 ug/l. In 1994, the Suffolk County monitoring well ECM-GW07 was measured to contain TCA at a concentration of 75 ug/l. The other off site monitoring wells contained lower concentrations of TCA. As indicated above, the current round of groundwater investigation did not find evidence of VOC contamination throughout the area investigated in 1994 and 1995.

To determine the potential fate of the TCA, the retardation factor for TCA was calculated. The retardation factor is unitless and represents the ratio of groundwater flow velocity to chemical migration velocity. The calculation is based on the seepage velocity of groundwater (speed at which groundwater flows) and the adsorption coefficient for TCA onto saturated soils. Based on the properties of TCA and the aquifer, the retardation is estimated to be 1.94, indicating that TCA should travel at approximately one half the rate of groundwater. Using groundwater elevation mapping conducted in 1997, groundwater flows to the northeast at this site. The location of the near offsite and far offsite wells were selected based on groundwater flow direction from the ECM laboratory and historic groundwater contamination.

Based regional groundwater contours (from 1997) and slug test data from the NWIRP Calverton investigations, the groundwater seepage velocity at the site is estimated to vary from approximately 270 feet per year for the shallow groundwater to 27 feet per year for the intermediate depth groundwater. The corresponding TCA velocities are 135 feet per year and 13.5 feet per year. Therefore, based on the historic analytical data and groundwater and contaminant velocities, the disappearance of TCA at the site cannot be accounted for solely by washout.

The reported half life of TCA in groundwater is approximately 0.73 years via a hydrolysis reaction and 0.4 to 1.5 years via unacclimated aerobic biodegradation (Howard, et all, 1991). A half life is the time required for a chemical concentration to decrease by a factor of 2.0. Based on natural degradation rates a peak TCA concentration of 70 ug/l in 1994 could degrade to a non detected value (1 ug/l) in 2.4 to 9.0 years. These estimated natural degradation rates are consistent with the observed disappearance of TCA at the ECM Area and associated down gradient locations.

TABLE 4-1

ANALYTICAL RESULTS (ug/l) SITE 9 - ECM AREA NWIRP CALVERTON, NEW YORK

Chemical	ECM-TW07-2-5	ECM-TW07-1-20	ECM-TW08-1-5	ECM-TW07-2-20	ECM-TW09-1-5	ECM-TW09-2-20
Date Collected	06-26-00	06-26-00	06-27-00	06-27-00	06-27-00	06-27-00
Sample depth (bwt)	5	20	5	20	5	20
Acetone		·				
Carbon disulfide						
1,1,1-Trichloroethane						

Chemical	ECM-TW10-1-5	ECM-TW10-2-20	ECM-TW11-1-5	ECM-TW11-2-20	ECM-TW12-1-35	ECM-TW12-2-50
Date Collected	06-28-00	06-29-00	06-29-00	06-29-00	07-17-00	07-17-00
Sample depth (bwt)	5	20	5	20	5	20
Acetone						
Carbon disulfide						
1,1,1-Trichloroethane						

Chemical	ECM-TW13-1-35	ECM-TW13-2-50	ECM-TW14-1-49	ECM-TW14-2-64	ECM-TW15-1-42	ECM-TW15-2-57
Date Collected	07-17-00	07-17-00	07-18-00	07-18-00	07-18-00	07-17-00
Sample depth (bwt)	5	20	5	20	. 5	20
Acetone						
Carbon disulfide			:			
1,1,1-Trichloroethane						

Chemical	ECM-TW20-45-1	ECM-TW20-60-1	ECM-TW20-80-1	ECM-TW20-100-1	ECM-TW20-120-1
Date Collected	08-11-00	08-11-00	08-11-00	08-11-00	08-11-00
Sample depth (bwt)	5	20	40	60	80
Acetone		-		18	
Carbon disulfide					7
1,1,1-Trichloroethane			2		

TABLE 4-1 (Continued) ANALYTICAL RESULTS (ug/l) SITE 9 - ECM AREA **NWIRP CALVERTON, NEW YORK** PAGE 2

Chemical	ECM-TW21-45-1	ECM-TW21-60-1	ECM-TW21-80-1	ECM-TW21-100-1	ECM-TW21-130-1
Date Collected	08-14-00	08-14-00	08-14-00	08-14-00	08-14-00
Sample depth (bwt)	5	20	40	60	90
Acetone					
Carbon disulfide					
1,1,1-Trichloroethane					

Chemical	ECM-MW01	ECM-MW01	ECM-MW01	
Date Collected	06-24-97	11-14-97	07-10-00	
Sample depth (bwt)	5	5	5	
Acetone	NA	NA		
Carbon disulfide	NA NA	NA		
1,1,1-Trichloroethane	NA	NA		
Cadmium	ND(2.6)	ND(2.6)	NA	

Chemical	ECM-MW02	ECM-MW02	ECM-MW02		
Date Collected	06-24-97	11-14-97	07-10-00		
Sample depth (bwt)	5	5	5		
Acetone	NA .	NA			
Carbon disulfide	NA	NA			
1,1,1-Trichloroethane	NA	NA			
Cadmium	ND (2.6)	ND (2.6)	NA		

ND (2.6): NA:

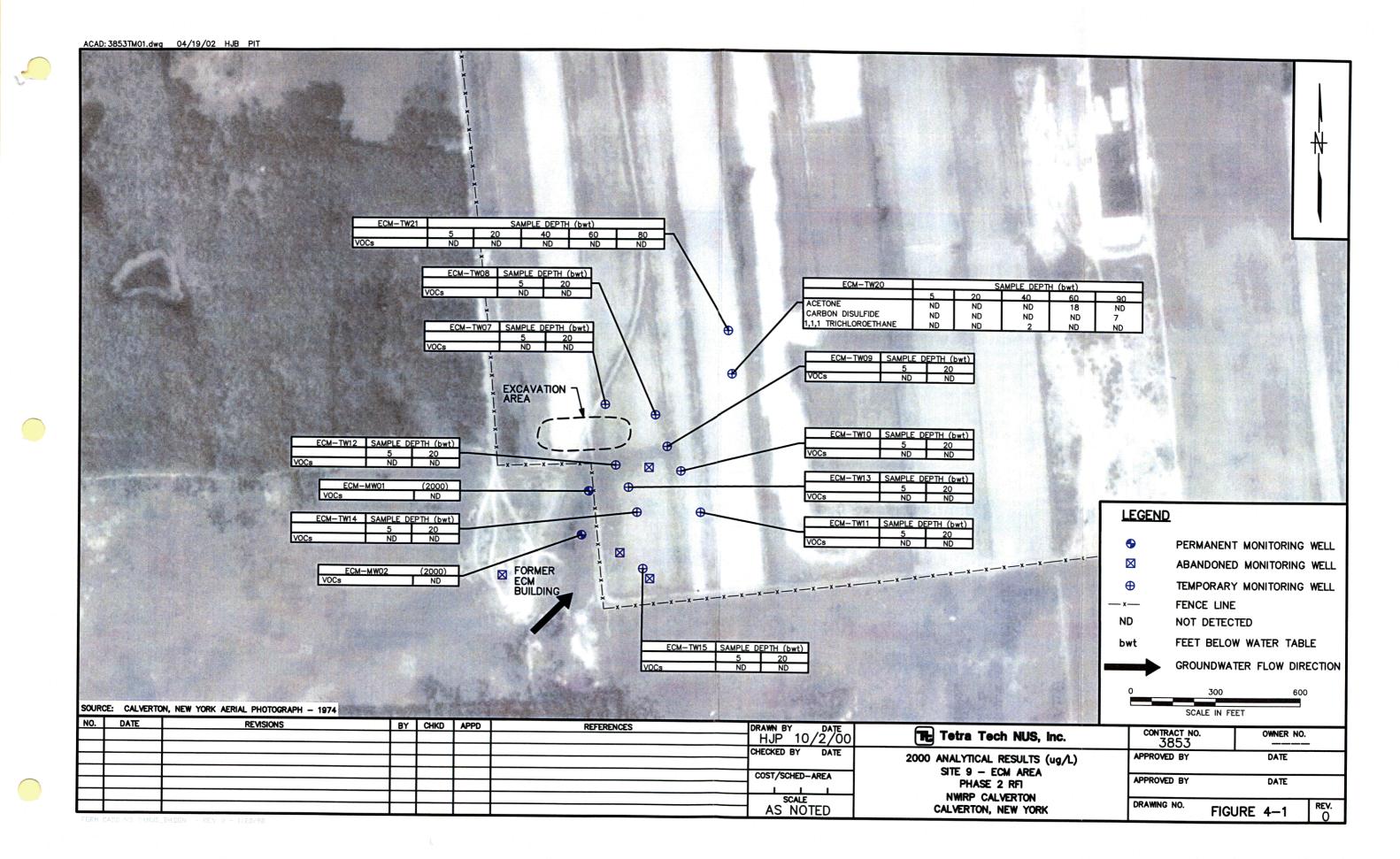
Not detected at 2.6 ug/l. Not analyzed

Bwt:

Feet below water table.

Blank space:

Analyzed but not detected. Detection limit was approximately 1 ug/l for 1,1,1-Trichloroethane.



5.0 CONCLUSIONS AND RECOMMENDATIONS

- Historically, TCA has been found in site groundwater at concentrations greater than New York State drinking water standard of 5 ug/l, but less than Federal drinking water standard of 200 ug/l. The peak measured concentrations of TCA were 190 ug/l in 1990/1991 (ECM-GW007), 70 ug/l in 1994 (ECM-GW007), and 2 ug/l in 2000 (ECM-TW20). In 2000, monitoring wells were installed near ECM-GW007; however, TCA and its breakdown products were not detected in this area at this time.
- Based on the current results, TCA and its breakdown products are not present at the site or in down
 gradient areas at concentrations that exceed Federal or state drinking water standards. The likely
 fate of the historic TCA and related contamination is natural degradation via either biological or
 chemical reactions.
- 3. Based on the absence of contamination, no further action is recommended nor warranted at the site.

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APPENDIX A
FIELD FORMS



GROUNDWATER SAMPLE LOG SHEET

								Page	of
Project No.: [] Domest			<u> 457</u>	-alver o	ton	Sample ID No.: Sample Location: Sampled By: C.O.C. No.:		ECM-TW07-2-4 ECM SW	
∭ Monitori % Other W [] QA Sam	Vell Type:	Tlustora	Temporary monitoring well			Type of Sample: [X] Low Concentration [] High Concentration			
SAMPLING DAT	'A:								
	6/00	Color	pН	S.C.	Temp.	Turbidity	DO	ORP	Other
	378	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: くっしか PURGE DATA:	iers, fumf	<u></u>							
Date: 6/26	6/60	Volume	pН	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
method: عنام Method	ersible fump	0	6.75	111	20.74	196	11.65	83.9	
Monitor Reading	(ppm):	1258	5.79	106	17.03	12.5	11.88	243	
Well Casing Diam	neter & Material	1305	5,29	103	16.54	0.0	11.32	251	
Type: スピς.	1981	1710	5.17	104	16.29	1.2	11.31	763	
Total Well Depth	(TD): Ч≶	1315	5.02	104	16.29	0.8	11.38	スフ3	
Static Water Leve	el (WL): 37.64	1 <i>370</i>	4.94	104	16.33	0.7	11.20	278.5	
One Casing Volu	me(gal/L): i , え	1325	4.90	104	16.39	٥،٥	((,13	280	
Start Purge (hrs):	1253							•	
End Purge (hrs):	1375								
Total Purge Time	(min): \$320								
Total Vol. Purged	l (gal/L):								
SAMPLE COLLE	CTION INFORMA	TION:							
	Analysis		Preserv	vative		Container Re			Collected
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GROUNDWATER SAMPLE LOG SHEET

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Project Site Project No.		NWI	RP C	alvers 20	lo n	Sample Sample Sample	Location:	ECM-TWO7-1-	
☐ Monito	stic Well Data oring Well Data Well Type: ample Type:	Temporary Monitoring Well			<u>e 11</u>	C.O.C. No.: Type of Sample: [X] Low Concentration [] High Concentration			
SAMPLING DA	TA:								
Date: 6/ 공신	:/00	Color	pН	S.C.	Temp.	Turbidity	DO	ORP	Other
Time:	230	Visual	Standard	mS/cm	°c	NTU .	mg/l	mV	NA
PURGE DATA:	ueve, pump	<u> </u>			·				
	6/00	Volume	рН	s.c.	Temp. (C)	Turbidity	DO 🦫	Salirlity	Other w.L
		0	7.68		16.67	136	12.76	75.2	Other 100
Method: ≰v k m Monitor Reading		()>E	7.04	79	16.06	111	1271	1892	37.7.
	meter & Material	1200	6.05	73	16.49	7.2	12.61	187.2	
Type: 2 ' 9		705	5,58	 / / _ 	<u> </u>	2.8	13,16	188	
	h (TD): 60 '	1210	5.47		15.71	17.2	13.37	198	
	vel (WL): 37,64	1215	5.42		15,94	14.7	13.05	203	
	lume(gal/L): 3 . 6		5.40		15.58	3.6	13.20	209.1	
		1270	5.38	71	15.56	0.6	13.46	215	
Start Purge (hrs End Purge (hrs)		1275	5.38		15.55	2.0	13,45	220	
Total Purge Tim		1230	3.23	, ,	17,73	<i>a. v</i>	19, 13	2.20	,
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	ECTION INFORMA	TION:	<u> </u>						
	Analysis		Preser	vative		Container R	equirements		Collected
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GROUNDWATER SAMPLE LOG SHEET

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Project Site Name: Project No.:	NWI	RP Ca	lverto	? h	Sample Sample Sample	Location:	ECM -T	-W08-2-
Domestic Well Data Monitoring Well Data Other Well Type: QA Sample Type:	h+c	dvopunc	<u>b</u>		C.O.C. No.: Type of Sample: [X] Low Concentration [] High Concentration			
AMPLING DATA:								
Date: 6/27/80	Color	pН	S.C.	Temp.	Turbidity	DO	ORP	Other
ime: 0 9 55	Visual	Standard		°C	· NTU	mg/l	mV	NA
lethod: Hydropunch	1. Brn	6.57	78	70.04	1170	8,01	66	
URGE DATA:	T	T			WE 1 4 414		T	T
ate:	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
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onitor Reading (ppm):		 \					 	
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tatic Water Level (WL):		ļ					<u> </u>	
one Casing Volume(gal/L):		ļ					ļ	<u> </u>
tart Purge (hrs):		ļ					<u> </u>	
nd Purge (hrs):								
otal Purge Time (min):							. `	
otal Vol. Purged (gal/L).								
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Circle if Applicable:					Signature(s			
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Project Site Name: Sample ID No.: NWIRP Calverton Sample Location: Project No.: Sampled By: D. Whalen C.O.C. No.: [] Domestic Well Data Type of Sample: [] Monitoring Well Data [X] Low Concentration Other Well Type: [] High Concentration QA Sample Type: SAMPLING DATA: Color S.C. Turbidity DO ORP Other Date: 6/27/00 Temp. Saley °C NTU mV Standard mg/l Time: Visual mS/cm Method: Brn 203 22.97 リミス 4.17 37, BRN Hydro Punc PURGE DATÁ: Other **Turbidity** DO Salinity Date: Volume pН S.C. Temp. (C) Method: Monitor Reading (ppm): Well Casing Diameter & Material Type: Total Well Depth (TD): Static Water Level (WL): One Casing Volume(gal/L): Start Purge (hrs): End Purge (hrs): Total Purge Time (min): Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMATION: Preservative **Container Requirements** Collected Analysis VOC 2 KYOm1 OBSERVATIONS / NOTES: Hydropunch screen at 43-44' bgs Signature(s): Circle if Applicable: Dauld Vlula MS/MSD **Duplicate ID No.:**



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Project Site		NWIRP Calverton				Sample ID No.:			woq-2-2
•						Sample	d By:	D.W	<u> </u>
[] Dome:	stic Well Data	•				C.O.C. 1	No.:		
	oring Well Data					Type of			
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	77-00	Color	На	S.C.	Temp.	Turbidity	DO	ORP	Other
	510	Visual	Standard	1	°C	NTU	mg/l	mV	NA NA
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PURGE DATA:	17670000		10.56	<u> </u>					
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_	meter & Material								
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Total Well Deptl	h (TD):								
Static Water Le	vel (WL):				<u> </u>				
One Casing Vol	ume(gal/L):			6.					
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End Purge (hrs)		-							
Total Purge Tim									
Total Vol. Purge									
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NWIRP Calverton Project Site Name: Sample ID No.: ECM-TW10-1-Project No.: Sample Location: Sampled By: [] Domestic Well Data C.O.C. No.: Type of Sample: Monitoring Well Data [X] Low Concentration Other Well Type: [] QA Sample Type: [] High Concentration SAMPLING DATA: 6/28/00 ORP Date: Color pΗ S.C. Temp. Turbidity DO Other: 0℃ 0940 Visual NTU mg/l $\mathbf{m}\mathbf{V}$ Time: Standard mS/cm NA 8.29 7.59 Method: Hydroxuch Gray-Brn 6.11 98 607 30.1 PURGE DATA: Turbidity Other DO Salinity Date: Volume рΗ S.C. Temp. (C) Method: Monitor Reading (ppm): Well Casing Diameter & Material Type: Total Well Depth (TD): Static Water Level (WL): One Casing Volume(gal/L): Start Purge (hrs): End Purge (hrs): Total Purge Time (min): Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMATION: Analysis Collected Preservative **Container Requirements** 2×40ml NOC OBSERVATIONS / NOTES: Hydropunch screen at 48-49' bas Circle if Applicable: Signature(s): Doubl While MS/MSD Duplicate ID No.:



Project Site Name: NWIRP Calverton Sample ID No.: Sample Location: Project No.: Sampled By: C.O.C. No.: [] Domestic Well Data Type of Sample: [] Monitoring Well Data [X] Low Concentration Other Well Type: Hydrofunch [] High Concentration [] QA Sample Type: SAMPLING DATA: 6/28/00 S.C. Temp. Turbidity DO ORP Other Date: Color pН °C Time: Visual Standard mS/cm NTU mg/l NA gray Brown 16.52 8.60 6.2 Method: Hydropunch 1714 6.11 **PURGE DATA:** Turbidity DO Salinity Date: Volume pΗ S.C. Temp. (C) Other Method: Monitor Reading (ppm): Well Casing Diameter & Material Type: Total Well Depth (TD): Static Water Level (WL): One Casing Volume(gal/L): Start Purge (hrs): End Purge (hrs): Total Purge Time (min): Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMATION: **Container Requirements** Collected Analysis Preservative 2x40ml Voc **OBSERVATIONS / NOTES:** Hydrofunch screen at 63'-64' bgs Circle if Applicable: Signature(s): MS/MSD **Duplicate ID No.:** Donald Wholes



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Project Site Project No.:		Nu	vire (Calver	ton		ID No.: Location:	ECM-T	W11-1-0
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Date: 6	-28-00	Color	рН	S.C.	Temp.	Turbidity	DO	ORP	Other
Time:	5-28-00 348	Visual	Standard	l	°c	NTU	mg/l	mV	NA
	dre funch	14. 3rn	6,72	91	21.43	419	6.07	-48.3	
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OBSERVATION									
		. 1 -		a ∔ U :	8-49'	has			
	++ 4 1 10 - 1		vren e	~ 1		-) -			
	Hydnop	vuch 3C							
	ttydnof	vnch 3C	•						
	Hydnof	vuch 3C	•						
	Hydnop	'unch 3C							
	Hydnop	vnch SC							
Circle if Applic		runch SC				Signature(s			
Circle if Applic MS/MSD			·			Signature(s		d Whal)



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Project Site Project No.:	Name:	ENWI	7P C	alvent	o h	Sample ID No.: ECM -T			0 <u>2-2-11</u>
		·				Sample	i By:	DW	
	tic Well Data					, C.O.C. N			
	ring Well Data					Type of			
Other \		hydr	o punch	1			v Concent		
[] QA Sa	mple Type:				· · · · · · · · · · · · · · · · · · ·	[] High	Concentr	ation	
SAMPLING DA	TA:				1				
Date: 6/ス	×100	Color	рН	s.c.	Temp.	Turbidity	DO	ORP	Other
	435	Visual	Standard	mS/cm	° C	NTU	mg/l	mV	NA NA
Method: Lydro	punch	it. Bru	6.64	107	727,41	1249	10.68	41.6	
PURGE DATA:									
Date:		Volume	pН	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:									
Monitor Reading	(ppm):								
	meter & Material								
_	meter a material			\					
Туре:		<u> </u>							
Total Well Depth								,	
Static Water Lev								<u> </u>	
One Casing Vol	ume(gal/L):	<u> </u>					<u> </u>		
Start Purge (hrs):								
End Purge (hrs)	:								
Total Purge Tim	e (min):				:				
Total Vol. Purge	d (gal/L):								/
SAMPLE COLL	ECTION INFORMA	TION:	:						
	Analysis		Preserv	vative		Container Re	equirements		Collected
]			ZX 40	m		\ \ \
	VOC			war in the same					1
	VOC					```			
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	NOC								
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	VOC								
	VOC								
OBSERVATION									
OBSERVATION	IS / NOTES:								
OBSERVATION		unch sc	neen a	+ 63	-64' 6	95			
OBSERVATION	IS / NOTES:	unch sc	neen a	+ 63	-64' 6	95			
OBSERVATION	IS / NOTES:	unch sc	neen a	t 63	164' 8	95			
OBSERVATION	IS / NOTES:	unch sc	neen a	+ 63	-64' 6	95			
OBSERVATION	IS / NOTES:	unch sc	neen a	+ 63	-64' 6	95			
	is/NOTES: Hydrop	unch sc	neen a	t 63	- 64' E	<u> </u>			
OBSERVATION Circle if Application	is/NOTES: Hydrop		neen a	+ 63	-64' 6	Signature(s): Fouldh		



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Project Site Name: Project No.: [] Domestic Well Data [] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	NuIRP 739 Tempos				Sample Sample C.O.C. I Type of [X] Lo	Location: d By:	ECM A	L-01-35 Trea Shickora
SAMPLING DATA:	a san aya sa san sangalanga	taging in Apple or	. Selection	and presentation of			127 SP 148 31	manuscript and the second
Date: 7-17-00	Color	рH	s.c.	Temp.	Turbidity	DØ	ORP	Other
				°C				
Time: 0940	Visual	Standard			NTU	mg/l	mV / 2.0	NA NA
Method: Hydropsach	very chousy	6.41	76.3	17.4	988	6.2	120	
PURGE DATA:	Waganery ed	grissis, magni	ng tagangg	press, and				
Date: N/A	Volume	рH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:	/							
9 (
Well Casing Diameter & Material								
Туре:								
Total Well Depth (TD):								
Static Water Level (WL):					\longrightarrow			
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								
SAMPLE COLLECTION INFORMAT	TION:	Salaja e e c	**. ;	The land of the second of the	r ing artistry — and she	alahahan juga seberahan dari dari dari dari dari dari dari dari		
Analysis		Preserv	ativa		Container Re		143)	Collected
Vocs		HC		Hor		メユ)		
<u> </u>		<u></u>		701	I VIZE	<u> </u>		
								
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OBSERVATIONS / NOTES:	7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 		-					
(1)	- 4 1	1 14	L 26	ALON	~ ~1 · ·			- 6
- Hydropunch Supler	ser ar	epor	JF 33	ter De	s. Inis is	Kardde i	i marely	y 5 Ret
below water table * Slight oily show see - No odor or elevated	J 30	fee t B	6.5 .					j
*		•	2 4	1	. 4 7	1 .	1	1
- Slight oily show see	n on Sur	Lice o	, wate	er used	tor lield	s bush	15/2	Į.
- No odor or elevated	PIN N	وحطامه	absel	rved_				
	•	7						1
Circle if Applicable:			· · · · · · · · · · · · · · · · · · ·		Signature(s):			
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MS/MSD Duplicate ID No.:					1 1	At		I
					·	W Y		-/ J



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Project Site Project No.:		NWIAP 73	Celver 98	ton		Sample Sample	ID No.: Location:	ECM-TWIS	1-02-50
∬ Monito	stic Well Data oring Well Data Well Type: imple Type:	Tempo	cery u	Jell		[X] Lo			hickord
SAMPLING DAT	A:	on the colon and the for	day ji biyya c	of the published					arment men or year
Date: 7-17		Color	рH	s.c.	Temp.	Turbidity	DO	ORP	Other
Time: 103	35	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA
Method: Hッと	roonch	clindy	6.26	30.9	17.0	210	8.4	200	
		Budy Debig of Co.	apples ("plate"		latigate in the con-		District was and as and		
Date: N/	4	Volume	pH ·	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:									
Monitor Reading	(ppm): D		/						
Well Casing Dian	neter & Material								
Туре:									·
Total Well Depth	(TD):								
			<u> </u>						
Static Water Leve								<u> </u>	
One Casing Volu									
Start Purge (hrs):									
End Purge (hrs):									
Total Purge Time	(min):						-		
Total Vol. Purged									7
SAMPLE COLLE	ECTION INFORMAT	TION:	Salagija, ka	. 4. (1947)	Chij dagaga galari	of green on the		t	
	Analysis		Preserv			Container Re			Collected
V ^c)Cs		HY		40 M	I VIZIS ((X 2)		
									
		· · · · · · · · · · · · · · · · · · ·							
	<u> </u>					·	•		
,									
									·
OBSERVATIONS									
-Hydropun Below Wi	ch Sampler. Her table of	set at a	tepth 6	f 50	Ret BES	i. this is	approxim	nately 2	ofeet
- No odor	s, stains, a	releval	ice PI	s Red	1795 OF	served			
1	-	•							1
Circle if Applical	ble:					Signature(s):			
MS/MSD	Duplicate ID No.:						10		1
~						Wift	18_		



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Project Site Name: Project No.:	NWIRF	<u>Celu</u>	rton		Sample	Location:	ECM-TW13 ECM 14re	4
☐ Domestic Well Data ☐ Monitoring Well Data ☐ Other Well Type: ☐ QA Sample Type:	Temper	eg W	ell		[X] Lo	-		
SAMPLING DATA:		and Appendix	jeroja bedž			<u>ACRESCADA</u> E		Best a facility to both
Date: 7-17-00	Color	pН	s.c.	Temp.	Turbidity	DO	ORP	Other
Time: 1346	Visual	Standard	mS/cm	<u>°C</u>	NTU	mg/l	meV	NA
Method: 1+22-00-16h	cloudy	5.94	48.5	20.1	750	6.7	176	
PURGE DATA:		nagalog tab		duspa.		Samuel of the second		
Date: NA	Volume	рH	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:								·
Monitor Reading (ppm):								
Well Casing Diameter & Material		<u> </u>	· · · · · · · · · · · · · · · · · · ·				 	
•							 	
Type:								
Total Well Depth (TD):								
Static Water Level (WL):							ļ	
One Casing Volume(gal/L):				,		····		
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								·
Total Vol. Purged (gal/L):								
SAMPLE COLLECTION INFORMA	TION:	rády o c	11.4	(Marchan, gr	e jedenskij (j. 18 aplaulj		4	
Analysis		Preserv	ative		Container Re		بضير مسواحات بمساورات	Collected
Voc.		HC	J	401	11 Veels	(x2)		2
			+					
	· · · · · · · · · · · · · · · · · · ·						· · · · · · · · · · · · · · · · · · ·	·
								
								
		L		<u> </u>				<u> </u>
OBSERVATIONS / NOTES:			····					
	- /	1 ,	, ,	` a . ^	1000			-6
- Hydropunch Semple Below water table	of 30	er des	BGS.	" 55 fce	F 1665.	This is	roughly	5 Feet
-poodars, strins, or								
, ,								
Circle if Applicable:					(Ci4-)	•		
		····	<u> </u>		Signature(s)	•		
MS/MSD Duplicate ID No.:	*				Lot	to		



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∬ Monito ★ Other \		DwIRF 739	Celve			Sample ID No.: E(M-TWI3-02-5. Sample Location: E(M Area Sampled By: Iline Shickord C.O.C. No.: Type of Sample: [X] Low Concentration [] High Concentration				
SAMPLING DAT	A:	e utera de sign	alanga ji gapatis	1.04468					design of the second	
	7-00	Color	pН	s.c.	Temp.	Turbidity	DO	ORP	Other	
Time: 143		Visual	Standard		°C	NTU	mg/l	mV	NA	
	ropud	My choudy		51.1	20.7	979	7.3	251	-	
PURGE DATA:	A			e e e e e e e e e e e e e e e e e e e						
Date: N	VA	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other	
Method:										
Monitor Reading	(ppm): O									
Well Casing Dian	neter & Material									
Туре:					/					
Total Well Depth	(TD):									
Static Water Leve	H (WL):									
One Casing Volu					***					
Start Purge (hrs):							$\overline{}$			
End Purge (hrs):										
	(i-)									
Total Purge Time							·	 		
Total Vol. Purged	(gavl). CTION INFORMAT	TION:	Parkhamenton C	** 25	. traj disense a a c	en appealant in 1967 D	aasha taa aasa saa saa aa aa	No. No.		
	Analysis	ION	Preserv	· · · · · · · · · · · · · · · · · · ·		Container Re			Collected	
	9C s		He			MI VIELS	(V)		7	
				-		,				
		i								
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OBSERVATIONS	NOTES:					··			12.0	
11 .	1 C 1	1 1 1	:1. E	~ C	600	·			N 1	
Thydropus	h Sempler se efer feble	F 20	feet of	SOR	er 065.	Ikis U	approxim	whely 2	bleet	
									j	
- ho odor	s, stains,	or elev	ded f	1 O I	esdings i	abserved				
	·									
Circle if Applicat	ole:				 1	Signature(s):				
	Duplicate ID No.:						ــــــــــــــــــــــــــــــــــــــ		1	
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Project Site Name: Project No.:	NWIR	P (2)	ue-tor		Sample	Location:	ECM A	
					Sample		VINCE S	hickory
Domestic Well Date					C.O.C.			
[] Monitoring Well Da	ta					Sample:		
	Tempo	Gry (vell		_ [X] Lo	w Concent	ration	
[] QA Sample Type:		,			[] Higl	h Concentr	ation	
CAMPUNC DATA				este anticompany of the same	et uttavas suovususas alaiski	obliekosta razantzaka zakoreko		ne establica republicat de calden
SAMPLING DATA:	Color	На	s.c.	Temp.	Turbidity	DO	ORP	Other
				°C			1	
Time: 1245	Visual	Standard		L	NTU	mg/l	mV	NA NA
Method: itydroanch	Very clarky	6.11	45.3	18.3	>490	7.3	141	
PURGE DATA:	terr stellparagorise ter	ograpisku mitam	· · · · · · · · · · · · · · · · · · ·	property of the second	The second se	Hair Supramanaging Supramanaging Supramanaging Supramanaging Supramanaging Supramanaging Supramanaging Suprama Supramanaging Supramanaging Supramanaging Supramanaging Supramanaging Supramanaging Supramanaging Supramanaging		
Date: N/A	Volume	рH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:							·	
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type:								
Total Well Depth (TD):		<u> </u>			†			
Static Water Level (WL):	_		 					
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):			ļ					
Total Purge Time (min):								
Total Vol. Purged (gal/L):								
SAMPLE COLLECTION INFORM	MATION:	tion insperience	Mate.	gla i sprejera ese	The total Hebri			
Analysis		Preser	vative		Container Re	equirements		Collected
VOCS		_ H	4	401	41 Vials	(x2)		ユ
			***************************************			· · · · · · · · · · · · · · · · · · ·		
							· · · · · · · · · · · · · · · · · · ·	
•			······································		· · · · · · · · · · · · · · · · · · ·			
			-					
OBSERVATIONS / NOTES:								
Hydropunch Sample	rset at CLRUS	-depth	ا کو ا	49 Feet	BGS. T	his is i	s feet l	مداضي
water table of 44	TOWN THE .	` ,	^					
-No odors, steins	er elevi	tec 1	JU !	eedings	apierve	ط		
,								
Circle if Applicable:					Ciamate !			
	-				Signature(s)			
MS/MSD Duplicate ID N	0.:			•	/_	DAR		



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Project Site Name: Project No.:	NWIR!	P Celi 98	verten	:	Sample Sample	•	ECM-TWIFE ECM A VINCE S	4-02-64 ree 4.ckora
[] Domestic Well Data [] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	Tanpi	overy	well		[X] Lo	No.: Sample: w Concent h Concent	tration	
					• · · · · · · · · · · · · · · · · · · ·			Managara o mar ur udda ganot F. Alfrance.
SAMPLING DATA:	Color		7		Turbidity	DO	ORP	aces - ace forms directed
Time: 1225	Visual	pH Standard	S.C.	Temp.	NTU	mg/i	mV	Other NA
Method: Histrapanch	Verycloudy		48.4	18.7	>990	6.1	115	NA.
PURGE DATA:	sila dipara si ce	gaglel epople						
Date: 7-18-00 (VAS	Volume	рΗ	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: V/A								
Monitor Reading (ppm):		1						
Well Casing Diameter & Material								
Type:								
Total Well Depth (TD):							1	
Static Water Level (WL):	 							
One Casing Volume(gal/L):								
Start Purge (hrs):	 							
	 						$\overline{}$	
End Purge (hrs):	 						-	
Total Purge Time (min):							-	
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA	TION	ost-familianis	10.41	e traj alta jakoro enorgia	ng spira aging	adding a second	l interest	
Analysis		Preserv		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Container Re			Collected
Vocs		H<			40 MI VI		(2)	2
					 			
					· · · · · · · · · · · · · · · · · · ·			
								
					· · · · · · · · · · · · · · · · · · ·			
		-		· · · · · · · · · · · · · · · · · · ·				
OBSERVATIONS / NOTES:								2.48%
Hydropunch Supler s water table of 441	set et d Ref BES	leptho	F 64	Feet B.	es. 7%.	s is 20	Feet be	low
No odors, Stairs	or ele	- stell	PIC	reading	s observ	vel		
Circle if Applicable:					Signature(s):	•		
MS/MSD Duplicate ID No.:					. 0	4A8		
-1	-				UB	1/2		ì



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Project Site Name:	HWIRP	مسادت	٠		Sample	ID No	FCM -TIME	5-01-42
Project No.:	739	\$	787		Sample	Location:	ECAA	<u> </u>
					Sample			
[] Domestic Well Data	•				C.O.C.			
Monitoring Well Data				4		Sample:		
X Other Well Type:	Tenpor.	ry we	41			w Concen		
[] QA Sample Type:					_ U Higi	h Concent	ration	
SAMPLING DATA:		nergija etekke		en la composition			- 1 SIV	en en fransk blad in de skalender
Date: 7-18-00	Color	рΗ	s.c.	Temp.	Turbidity	DO	ORP	Other
Time: 8905	Visual	Standard		°C	NTU	mg/l	naV	NA
Method: If yero punch	very cloudy	6.02	50.7	19.6	>990	6.1	112	
PURGE DATA:	ni sanggaranis nd	arifigrati	er de Steleggi					
Date: N/A	Volume	рН	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Туре:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):					·			
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):.								
SAMPLE COLLECTION INFORM	ATION:	Uning the S	45	, infolioper o	Parati eggé	Parties		
Analysis		Preserv		<u> </u>	Container Re			Collected
Vocs		ite	<u>u </u>	40	mi viels	(X2)		2
						 		
				 		<u></u>		
	7.5.				· · · · · · · · · · · · · · · · · · ·			
								
 				L.,				
OBSERVATIONS / NOTES:					·			
- li)	co b at	1 i.	F 110	K-LO	10 -1 1			N 1
- Hydropunch Szaplar		epro	066	teel be	P. 750	n appu	ox, metely	15 Ket
- Hydropinch Sarpler Below Water tabl	e vi 37	rect	ව ශා.			-	·	,
- No odors, steins	ar elan	rfed f	ID H	edinas o	bserved	- :		
No Oceas, States	<i>y</i> . –,—			J	•			
Circle if Applicable:					Signature(s)	:		
MS/MSD Duplicate ID No	.:							
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Project Site Name: Project No.: [] Domestic Well Data	NWIR (<u>ا (۱۷</u> 18	erton		Sample Sample Sample C.O.C.			
[] Monitoring Well Data∫ Other Well Type:[] QA Sample Type:	Tong	orry	well		[X] Lo	Sample: w Concent n Concent		
SAMPLING DATA:	ورفيع المعاد سيراح	المنافعة والمستحد المتالي وجابرها	71 - 24 - 24 - 24 - 24	telejitistika (* . * . * . *	Company of the second			
Date: 7-18-00	Color	рН	s.c.	Temp.	Turbidity	DO	ORP	Other
Time: 0955	Visual	Standard	mS/cm	℃	NTU	mg/l	naV	NA.
Method: Hydropud		6.25	38.5	19.1	799c	8.6	158	-
PURGE DATA:	sta was plant	regilië Filotopo		president in		t interestation of the		
Date: N/A	Volume	pН	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Туре:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):		 						
End Purge (hrs):							 	
Total Purge Time (min):							 	
Total Vol. Purged (gal/L); SAMPLE COLLECTION INFORMA	ZON-MOST				The device of the constants			
Analysis	ION	Preserv		The state of the same	Container Re			
KOCS		H			1 VISE C			Collected
		175	1	701	1 1 140 C	^~		T
		 						
					~			
								
		<u> </u>	}					
OBSERVATIONS / NOTES:				·				
- Hydropunch Sempler 20 Feet below wat	set at entable	Jept of 3	Lof 5 7 Red	FREF BES.	BES. Th	رد در در	Sm IKasdo	tely
Circle if Applicable:					Signature(s)			
MS/MSD Duplicate ID No.:			100	drug of Coc	A 8 A	صدا		
- ECM-7	EW15-	03-1	00	المحمد	Cit	70		



IBD: To Be Determined

GROUNDWATER SAMPLE LOG SHEET

Page | of | Sample ID No.: Project Site Name: Clm-Tw20-120-01 NWIRP CALVERTON Sample Location: Ecm - Tw 20 Project No.: Sampled By: ROBERT GOUD [] Domestic Well Data C.O.C. No.: [] Monitoring Well Data Type of Sample: Other Well Type: ★ Low Concentration TEMPORARY WELL BORING ∏ High Concentration □ QA Sample Type: SAMPLING DATA: Date: 8-11-00 Color pΗ S.C. Temp. Turbidity DO TBD TBD °C NTU Visual mS/cm Time: /340 Standard mg/l Method: HYAROPANCH NA PURGE DATA: DO TBD TBD Date: NA Volume рΗ S.C. Temp. (C) Turbidity Method: Monitor Reading (ppm): Well Casing Diameter & Material Total Well Depth (TD): Static Water Level (WL): One Casing Volume(gal/L): Start Purge (hrs): End Purge (hrs): Total Purge Time (min): Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMATION: Preservative **Container Requirements** Collected Analysis HCI 2 x 40 ml Viale 2 VOC OBSERVATIONS / NOTES: HYDROPUNCH SAMPLER DRIVEN TO T OPEN AT 120 FT BELOW SURFACE IN BORING ECM - TWZU. INSUFFICIENT WATER VOLUME FOR FIELD MEASURE MENTS. NU ODORS OR RID. READINGS ABOVE BACKGROUND Circle if Applicable: Signature(s): **Duplicate ID No.:** MS/MSD Ruster 8/11/00



Page / of

Project Site Name: Project No.: [] Domestic Well Data [] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	NWIRP 7398 TEMPORA				Sample Sample C.O.C. Type of X Low	d By:			
SAMPLING DATA:									
Date: 8-11-00	Color	рH	s.c.	Temp. ⁰C	Turbidity	DO	TBD	TBD	
Time: /23r	Visual Ba~	Standard 6-51	mS/cm	20.2	NTU 3200	mg/l /7. 20	-40		
Method: HY BADPAULH PURGE DATA:									
Date: — NA —	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD	
Method:		F		топпри (- /	` `			,	
Monitor Reading (ppm):						-	<u> </u>		
Well Casing Diameter & Material	 						<u> </u>		
Type:		 							
Total Well Depth (TD):		<u> </u>	<u> </u>						
Static Water Level (WL):	 		ļ						
One Casing Volume(gal/L):	 		-						
Start Purge (hrs):									
End Purge (hrs):	_			-					
Total Purge Time (min):						·			
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA	ATION:	Sekiejekosekie Sekiejekosekie	riongesti ili Kalibria						
Analysis		Preser			Container Re			Collected	
Voc		140		2 × 4	10 ml v			2	
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OBSERVATIONS / NOTES:									
144 DROPUNCH SAM	plen on	IVEN TO	9 8 6	OPEN AT	- 100 F	- BELOW	u SURFI	KĊ	
IN BORING ECM	- Tw20								
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NO ODERS OR PID.	READING	Boo	IF BAC	KGROUND					
Circle if Applicable:					Signatúre(s)	4			
MS/MSD Duplicate ID No.					25	tul	8/11/60		
						<i></i>			
TBD: To Be Determined									



Project Site Name: Project No.: [] Domestic Well Data [] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	NWIRP 7398 TEMPORAR				Sample Sample C.O.C. I Type of A Low	Location: d By:			
SAMPLING DATA:				* 1					
Date: 8-11-00	Color	pH	s.c.	Temp.	Turbidity	DO	TBD	TBD	
Time: //22	Visual	Standard	mS/cm	°C	NTU	mg/l	mi		
Method: jygazarucus	BRN	6.80	174	21.2	3240	15.40	-46		
PURGE DATA:									
Date: - NA	Volume	pН	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD	
Method:									
Monitor Reading (ppm):		,							
Well Casing Diameter & Material									
Type:									
Total Well Depth (TD):									
Static Water Level (WL):									
One Casing Volume(gal/L):									
Start Purge (hrs):									
End Purge (hrs):	ł								
Total Purge Time (min):							 		
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA	l Tion:								
Analysis		Preser			Container Re			Collected	
VOC		Hel		2 x 40	al Vint			2	
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OBSERVATIONS / NOTES:									
HYDROPUNCH SAMPLER	PRIVERS	FU K	OPEN	A5 80 1	FF BELOW	SURFAC	T).)		
BORING ECM-TWZO	٠.								
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100 000RS OR P.T.D.	READING	s AB	ove B	ACH GROW	رد				
Circle if Applicable:					Signature/s):			
				nathing the said selection of the select	1		,		
MS/MSD Duplicate ID No.:		,			RO	//	8/11/00		
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Project Site Name: Project No.: [] Domestic Well Data [] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	NWIRP 7348 Tempora			16-	Sample Sample C.O.C. Type of A Low	Location: d By:				
SAMPLING DATA:										
Date: <i>§-11-00</i>	Color	рH	s.c.	Temp.	Turbidity	DO	TED.	TBD		
Time: /020	Visual	Standard		°C	NTU	mg/l		ļ		
Method: /// ORA PUNCH	Bruv	6.44	/84	21,1	/348		<u>-43</u>			
PURGE DATA:		ing recommendation		ticketin tidika tesketistaketika makenesessi uli			Balancia de dela como de Asserba de Ser			
Date: - NA -	Volume	На	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD		
Method:										
Monitor Reading (ppm):										
Well Casing Diameter & Material										
Туре:										
Total Well Depth (TD):										
Static Water Level (WL):										
One Casing Volume(gal/L):				1						
Start Purge (hrs):										
End Purge (hrs):										
Total Purge Time (min):										
Total Vol. Purged (gal/L):										
SAMPLE COLLECTION INFORMAT	ION:									
Analysis		Preser	vative		Container Re	quirements		Collected		
Voc		He	1	2 × 4	oml vi	alı		2		
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OBSERVATIONS/NOTES:	deligen de en	attended de se attende e () e se se en c	en betre più fint de les entre le con minera de	CONTRACTOR	() and a constraint of the constraint of the	and the second s				
HYDROPUNCH SAMPLE. ECM-TWZO.	n AMVEX	א פדו ע	OPEN	15 60	FT BEC	low Surf	ACE IN	BORNSL		
NO ODORS ON PED. 1	CEADINGS	ABOVO	3ACH	GROUNS						
Circle if Applicable;					Signature(s)	•				
MS/MSD Duplicate ID No.:					Pas	561	8/11	100		
TRD: To Be Determined					V	· · · · · · · · · · · · · · · · · · ·		_		



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Project Site Name: Project No.:	NWIRP 7398	CALVE	RTON		Sample		Ecm - Tw 20 - 45 - 01 Ecm - Tw 20			
					Sample		ROBERT (5000		
Domestic Well Data					C.O.C.					
Monitoring Well Dat				•	• •	Sample:		•		
Other Well Type:	TEMPORAR.	were	BORING			Concentra				
[] QA Sample Type:					. [] Higi	n Concentr	ation			
SAMPLING DATA:										
Date: 8-11-00	Color	рН	s.c.	Temp.	Turbidity	DO	780	TBD		
	Visual	Standard		°C	NTU	_	OZP	, , , ,		
Time: 0430	BRN				2900	15.10	- 47			
Method: //YIRO DUNCH PURGE DATA:		6.46	174	22.0	2700	73.70				
	Volume	1	s.c.		Turbidity	DO	TBD	TBD		
Date: — <i>NA</i> —	Volume	pН	S.C.	Temp. (C)	rurbidity	50	160	180		
Method:	+						 			
Monitor Reading (ppm):							ļ			
Well Casing Diameter & Material										
Туре:				/						
Total Well Depth (TD):										
Static Water Level (WL):					\					
One Casing Volume(gal/L):										
Start Purge (hrs):										
End Purge (hrs):										
Total Purge Time (min):										
Total Vol. Purged (gal/L):										
SAMPLE COLLECTION INFORM	ATION:									
Analysis		Preser	/ative		Container Re			Collected		
VUC		140	1	2 ×	40 ml	Viuls		2		
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OBSERVATIONS WHOTES:										
OBSERVATIONS/NOTES:					·····					
OBSERVATIONS INOTES:					·····					
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HYDROPUNCH SAMPLER					·····					
HYDROPUNCH SAMPLER	DRIVEN FO	, 100	OPEN A	45 F	·····					
1440RO PUNCH SAMPLER GCM - TW 20	DRIVEN FO	, 100	OPEN A	45 F	·····					
HYDROPUNCY SAMPLER GCM - TW 20	DRIVEN FO	, 100	OPEN A	45 F	·····					
1440RO PUNCH SAMPLER GCM - TW 20	DRIVEN FO ENDINGS A	, ANO BOVĒ 1	OPEN A	+ 45 F	·····	SUNFAC				
HYDROPUNCH SAMPLER Gem - TW 20 NO ODORS OR PID. R	DRIVEN FO	, ANO BOVĒ 1	OPEN A	+ 45 F	T. BELON	Sun;=Ac	e Tv Be	ANG.		
HYDROPUNCH SAMPLER GCM - TW 20 NO ODORS OR PID. R Gircle if Applicable:	DRIVEN FO	, ANO BOVĒ 1	OPEN A	+ 45 F	T. BELON	Sun;=Ac		ANG.		



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Project Site Name: Project No.:	NWIR 7	P Cal	lvente	· A		ID No.: Location:	ECM Area Visce Shickory		
[] Domestic Well Data [] Monitoring Well Data	Tenp	orary	We	11	C.O.C. No.: Type of Sample: Low Concentration			SAICKS H	
[] QA Sample Type:	•				[] High	Concent	ation		
SAMPLING DATA:									
Date: 8-15-00	Color	рН	s.c.	Temp.	Turbidity	DO	760	780	
Time: 0925	Visual	Standard	mS/cm	.°C 16.40	NTU	mg/l	ORP	SAL	
Method: Hydro punch PURGE DATA:	Very elusdy	8.79	259	78.70	1644	<u>_i.93</u> _	٠,٩	0,0	
Date: PA	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD	
Method:	/					· · · · · · · · · · · · · · · · · · ·		·	
Monitor Reading (ppm):									
Well Casing Diameter & Material									
Type:									
Total Well Depth (TD):									
Static Water Level (WL):						<u></u>			
One Casing Volume(gal/L):									
Start Purge (hrs):					·	·			
End Purge (hrs):									
Total Purge Time (min):									
Total Vol. Purged (gal/L):	- A Single on the State of the	encencia de de de desenta de la cale	riana anakin lalinik dideniki	aNiadriat Cirilia I arabendus	i Andria i Nacioni de Paris de Lina	erik istoria a sama sama hali di ka			
SAMPLE COLLECTION INFORMAT Analysis	IUN:	Preserv			Container Re			Collected	
VOLs		H			MI Viels	(x2)		2	
									
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OBSERVATIONS / NOTES:									
- Hydropunch Son (unsuccessful sample o	pler s	et et	- dept	hat 1	130 fee	+ B.C.	5. Par s	impliny.	
(unsuccessful sample a	rtt u npts,	dueto	lzck ol	Tecove	ry,mede	at 120	off and	125 P. BGS	
- No odors, stains									
			i i i i i i i i i i i i i i i i i i i		Cian at				
Gircle if Applicable:					Signature(s):	<i>n</i>			
MS/MSD Duplicate ID No.:			•		Signature(s)	1 da	15		



Project Site Name: Project No.: [] Domestic Well Data [] Monitoring Well Data [] Other Well Type: [] QA Sample Type: SAMPLING DATA:		orary l	المعنر		Sample Sampled C.O.C. I Type of XLOw [] High	Location: d By: No.: Sample: Concentra Concentra	ation			
Date: 8-14-00 Time: 1115	Color Visual	pH Standard	S.C. mS/cm	Temp. ℃	Turbidity NTU	DO mg/l	TBD	TBD		
Method: Hydropunch	tery churchy	(IMSU	Fraint	Volume	حده عوسحط	for fiel	Mezou	13)		
PURGE DATA:		e i (H ijan)								
Date:	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD		
Method:								·		
Monitor Reading (ppm):			·							
Well Casing Diameter & Material										
Туре:										
Total Well Depth (TD):										
Static Water Level (WL):										
One Casing Volume(gal/L):										
Start Purge (hrs):										
End Purge (hrs):			·							
Total Purge Time (min):							"			
Total Vol. Purged (gal/L):										
SAMPLE COLLECTION INFORMAT	TION:						gere ergeleigtet			
Analysis		Preser	/ative		Container Re	quirements		Collected		
VCCs	····	H	-1	40	My Viels	(XX)		2		
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OBSERVATIONS / NOTES:										
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- Hydropunch Simp - No odors, stan	s, of e	eleust	ed 1	PIO rea	dings of	p.v.c	3. <u>/</u>			
Circle if Applicable:					Signature(s)			·		
MS/MSD Duplicate ID No.:			22-24-2-4-11-22-4-11-11-11-11-11-11-11-11-11-11-11-11-1	emperat Books		HA)	R			
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Project Site Name: Project No.: [] Domestic Well Data [] Monitoring Well Data [] Other Well Type: [] QA Sample Type:		-	we-	_	Sample Sample Sample C.O.C. Type of Low	ECM F	21-60-01 Ares Shuklora			
SAMPLING DATA:										
Date: 8-14-00	Color	рН	s.c.	Temp.	Turbidity	DO	IBD	,18 0		
Time: 1225	Visual	Standard	mS/cm	₀C	NTU	mg/l	ORP	SAL		
Method: Hydropunch	Very cloudy	9.13	253	16.84	1345	5.13	-38.4	. 6.0		
PURGE DATA:										
Date: NA	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD		
Method:							<u> </u>	ļ		
Monitor Reading (ppm): 👝			<u> </u>					<u> </u>		
Well Casing Diameter & Material										
Туре:										
Total Well Depth (TD):										
Static Water Level (WL):	1									
One Casing Volume(gal/L):										
Start Purge (hrs):	1									
	+		 							
End Purge (hrs):					ļ		 			
Total Purge Time (min):			 		 			——		
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORM	ATION):	dis tearne impag	Sanstaning popul							
Analysis		Preser			Container Re	printed and delice, were introduced to the printed	distribute de la constantidad de	Collected		
VDCS		H	<u> </u>	4	OMI Me	· / /	<u> </u>	2		
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OBSERVATIONS / NOTES:										
i i i i i i i i i i i i i i i i i i i		- L	1]	V F						
- Hydropunch So	which ?	Set a	t dep	T-01	60 Ke	7 Y.5	·J.			
- No odors sta	. ` • • • • • • • • • • • • • • • • • • •	- 1	ted	PTN	l read	in a h	Commend			
- ho ocars 210	2115 01	EIE		. 1	100.	75 00.) = 1 V			
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Circle if Applicable:					Signature(s)					
		in incompression			Signature(S)					
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TBD: To Be Determined

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Project Site Name: Project No.: [] Domestic Well Data [] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	NWIR 7.	P (2 398			Sample Sample Sample C.O.C. I Type of Low	Vixe.	ShickerA		
SAMPLING DATA:						action and adjoint the free or and the		and control or an analysis of the control of the co	
Date: 8 14 -00	Color	pН	s.c.	Temp.	Turbidity	DO	100	IDB	
Time: 1440	Visual	Standard	mS/cm	· °C	NTU	mg/l	ORP	SAL	
Method: Hydro punch PURGE DATA:	very cloudy	7.81	145	16.60	1106	4.16	-70.2	0.0	
Date: WA	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD	
Method:					 		 :		
Monitor Reading (ppm): 🌣									
Well Casing Diameter & Material									
Туре:									
Total Well Depth (TD):									
Static Water Level (WL):									
One Casing Volume(gal/L):									
Start Purge (hrs):									
				·					
End Purge (hrs):	-				 				
Total Purge Time (min):									
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMAT	ION:								
Analysis		Preserv	ative		Container Re	quirements		Collected	
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OBSERVATIONS // NOTES:									
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-Hydropunch Senf	oler Se	4 94	dept	Kot 8	30 te	+ B.G.	5 .		
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- No odors, stains	ا ه د	ilevet	ec t	170 K	-ceings	DESSEL	سلم	,	
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Project Site Name: Project No.:	HWIR	P C =398	lverte	5^	Sample Sample Sample	ID No.: Location: d Bv:	ECM-TWG ECM A	21-100-01 rec ShickorA		
☐ Domestic Well Data		*			C.O.C. No.:					
Monitoring Well Data						Sample:				
Other Well Type:	Tan	apore,	ru Le	sell		Concentra	ation			
[] QA Sample Type:			7			Concenti				
-						and the second s				
SAMPLING DATA:										
Date: 8-14-00	Color	рН	s.c.	Temp.	Turbidity	DO	780	100		
Time: 1545	Visual	Standard	mS/cm	°C	NTU	mg/l	ORP	SAL		
Method: Hydropunch	Cloudy	7.13	306	16.18	1285	1.97	<u>- 98.3</u>	C.O		
PURGE DATA:										
Date: NA	Volume	pН	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD		
Method:										
Monitor Reading (ppm):										
Well Casing Diameter & Material			/							
Type:										
Total Well Depth (TD):										
Static Water Level (WL):										
										
One Casing Volume(gal/L):										
Start Purge (hrs):										
End Purge (hrs):										
Total Purge Time (min):										
Total Vol. Purged (gal/L):										
SAMPLE COLLECTION INFORMAT	ION:									
Analysis		Preserv			Container Re			Collected		
VOLS				40	MI Viel	(X))	<u> </u>		
										
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OBSERVATIONS/NOTES:							eleja ja je era ajus			
- Hydropench Sem	pler s	et at	100	Ret	B.G5.					
-No odors, ste	1	,	1.	DIA	1 •	c - 6-0-	المدم			
- No odors ste	ins, o	c ele	uzted	120	rescing	s obse	vee_	·		
			Selekting halapagaganan Menangan anan	a paragraph and Source of						
Circle If Applicable:					Signature(s)					
MS/MSD Duplicate ID No.:						(.	40			
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TBD: To Be Determined	****									

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		NAME: NUMBE	:p.	<u> </u>	VIRP 37 DEC	Calve	BORING NL DATE:	JMBE	R: TW07 6/26/00				
		COMPA			DE/	7°4	GEOLOGIS'	T: -	D. Whaleu				
	LING				VEV	1.71	DRILLER:	•	D. Whaleu				
	T	1	<u> </u>			MAT	ERIAL DESCRIPTION	T 		PID/E	ID Res	dina	(nnm)
Sample No. and Type or RQD	(FL)	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness		~	U S C S +	Remarks				Driller BZ**
	₹.0					F rn	F-mgr sand, 5; 1fy soul blobbles on a gra		dans!				
						H. Brn	FGL sand, some MGR		Samp				П
3954						jen I	+r. stit						
b) /	4.0					V	· ·	+ +		0	0	D	0
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0958	0.0						FGR to CGR sand			0	0	0	0
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** Indu		3.2		HIA			ing frequency if elevated reponse read.	<u></u>	Drill Backgroun	ing A d (pp		0,0	2
Conv	erted	to Well:		Yes			No Well I.	D. #:					
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PRO.	IECT	NAME: NUMBE COMPA	R: NY:	NV	VERP 457 De	(alv 0 3: 1+a	BORING NU DATE: GEOLOGIST DRILLER:	MBE	R: TW 07 6-26 RWholen				
UKILI	LING	RIG:			7					T			
Sample No. and Type or RQD	(FL)	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	ERIAL DESCRIPTION Material Classification	U & C & •	Remarks		Sampler BZ G		
							FGR to MGR Scand . tr, silt		moist/Wit				
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	e monito				ehole. Increa	se readi	ng frequency if elevated reponse read.		Drill Backgroun	ing A d (pp			
Conve	erted t	to Well:		Yes			No Well I.I	D. #:					

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PRO	JECT I	NAME:		NW	TRP	(1)	erton BOI	TING NUMB	ER:	ECM - TI	N O	8		
ૈ ' ૧૦.	JECT I	NUMBE	R:		IRP 0 379 Delt	8	DA	ΓE:		: ECM-TW08 6/26/00 and 6/27/00 D. Whalln				<u> </u>
		COMPA	NY:		Delt	9	GE(OLOGIST:		D. Whalln				
DRIL	LING I	RIG:		-				LLER:						
						MAT	ERIAL DESCRIPTION				PID/F	ID Rea	ding	(ppm)
Sample No. and Type or RQD	(FL)	(%)	Sample Recovery / Sample Length		Soil Density/ Consistency or Rock Hardness	Colo	Material Classification	on S	R	emarks	Sample	Sampler BZ	Borehole**	Driller BZ**
1424						BR)	GravPl in Silty to CGR sand	FGR	D	ry				
						Light		Sand	Pa	mp	<u> </u>			
1445	10	/				BEN	FGR to CGR tr. silt, some p	epples		1				
1448	10.0					Light BEN					0	0	0	0
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	de monit	or reading i	in 6 foot int	ervais @ bo	A . 0'+		ling frequency if elevated reponse		-	Drill Backgroun	ing A d (pp			
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Conv	erted	to Well:		Yes		-	No	Well I.D. #	:					



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		NAME:		NWI	RP Calo	<i>jeut</i>	BORING NL	JMBE	R: ECM-th 6-27-00 D.Who	10	7		
		NUMBE	R:		45	70	DATE:		6-27-00)			
		COMPA	NY:			18140	GEOLOGIS'	T: ,	D. Who	len			
DRIL	ING I	RIG:					DRILLER:						
						MAT	ERIAL DESCRIPTION			PID/I	ID Rea	ding	(ppm)
Sample		Blows /	Sample	Lithology] U	,				
No. and Type or	(FL) or	(%)	Recovery / Sample	(Depth/Ft.)	Soil Density/			S		٠.	N	•	.
RQD	Run No.		Length	or Screened	Consistency	Color	Material Classification	C	Remarks	Sample	5	<u>6</u>	28
				interval	Rock	COIO	Material Classification	•		88	Sampler BZ	Borehole**	Driller BZ**
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		ng, enter ro			ehole Ir	المحمم جود	ng frequency if elevated reponse read.		Drilli	na ^	rec		
Rema			1 6 1001 Inte		olivie, increa:	e (680)	ny mequency ir elevated reponse read.		Background				_
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C	4 اماماس	o Well:		Vac			No Vell I.I	5 <i>u</i> .					
COLIVE	FILECT [U VVCII.		Yes			1YU ./ YVE [.]	J. #:					

Page <u></u> of <u></u>

		NAME:	D.	NWI	RP Cali	vert	BORING NL DATE: GEOLOGIS	JMBE	R: ECM-TW 6-27-1	09			
		NUMBE COMPA	K: NY:		759	1+0	GEOLOGIS'	T: -	D. Whallo	29			
	ING F					119	DRILLER:	-	VI WRAITON				
DI						ΜΔΤΙ	RIAL DESCRIPTION	T		PID/F	D Res	ding (ppm)
Sample No. and Type or RQD	Depth (FL) or Run No.	Biows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/FL) or Screened Interval			Material Classification	U & C & •	Remarks				Driller BZ**
1314						BFN	Silty FGR-CGR sand some gravel		Dry				
						1	J		Panf				
						L+ BRN	FGR +0 CGR Sand +v. 5;1+, some febble:						
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du		or reading	rock broker in 6 foot int	ervals @ bo	prehole. Incre	ase read	ling frequency if elevated reponse read.	-ting		ling A		0	
Conv	erted/	to Well		Yes			No Well I	.D. #:					

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		NAME: NUMBE	:p.	WK	TRP (alv	BORING NL	MBE	R: ECM-TWOG 6-27-00	<u>'</u>			
		COMPA			DEAT		GEOLOGIS	т.	0.whalen				
DRIL			W 1 .		UENT	<u>ج</u> ــــــ	DRILLER:	•.	O. Whaten				
						MAT	ERIAL DESCRIPTION			PID/F	ID Rea	ading	(ppm)
Sample No. and Type or RQD		Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness	Color	Material Classification	U & C & •	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
							FGR to MGR sand						
							Some plakes						
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	monito		ck brokene: 6 foot inter		ehole. Increas	e readin	g frequency if elevated reponse read.		Drillir Background			0	
Conve	rted to	o Well:		Yes		<u>.</u>	No ✓ Well I.D). #:					

Page ___ of <u>___</u>

		NUMBE			7398		BORING NU DATE:		6-28-	00			
		COMPA	NY:		Delta		GEOLOGIS' DRILLER:	l: <u> </u>	Diwhal	e _r			
DRILL	ING F	KIG:				1447				Teron	FID Rea	dino	
Sample No. and Type or	(FL)	Blows / 6" or RQD (%)	Sample Recovery <i>I</i> Sample	Lithology Change (Depth/FL)			ERIAL DESCRIPTION	U S C					
RQD	Run No.		Length	or Screened Interval	Consistency or Rock Hardness	Color	Material Classification	s ·	Remarks	Sample	Sampler BZ	Borehole**	Driller BZ**
c753						BKN	Silty FGR to CGR sand some gravel		·				
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756	5.0	\mathbb{Z}				Ligh+ BRN	FGR to CGR sand, some peobles, tr. silt		1		-		_
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		NAME:	. .	NV	NIRP	Ca	lventon	BORING N	IUMBER:	TW 1	<u> </u>			
		NUMBE	R:	 	739	8		DATE: GEOLOGIS	_{CT} . —	$\frac{6 R }{1}$	7/00			_
DRIL		COMPA	INT:		Dete	}		DRILLER:		t. Whal	<u> </u>			
DRIL	LING	KIG.					DIAL DECCRI	_			DID#	ID Rea	dina f	
Sample	Depth	Blows /	Sample	Lithology		MAIL	RIAL DESCRI	PHON	┦╻		PIDA	ID Kea	aing (D(Sill)
No. and Type or	(FL)	6" or RQD (%)	Recovery / Sample Length	Change	Soil Density/ Consistency or Rock Hardness	Color		assification	S C S +	Remarks	Sample	Sampler BZ	Borehole**	Oriller BZ**
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	e monito	ng, enter ro r reading in	6 foot inte		•	se readir	ng frequency if elevate	d reponse read.		Dri Backgrou	illing A nd (pp			
Conve	erted t	o Well:		Yes			No	Well I	I.D. #:			·············		

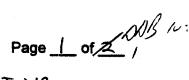


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	LING I						DRILLER:	·					
						MAT	ERIAL DESCRIPTION			PID/F	ID Res	ding	(ppm
Sample No. and Type or RQD	(FL)	Biows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	Soil Density/ Consistency or Rock Hardness		Material Classification	0 8 0 8 +	Remarks	Sample	Sampler BZ	Borehofe**	Driller BZ**
239						BEN	Silty FGR sand Some Gravel		Dry				
						Light			Damp				
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	50.0					V	V			0	D	O	0
	rock cor	ing, enter r	ock broken		rehole Incre	ase rea	ting frequency if elevated reponse read.		Dri	ling /	Area		
Rem							scils logged from auger	Cut		_			

Page <u>2</u> of <u>2</u>

		NAME: NUMBE	D.	Nw:	IRP C	luer	BORING NUDATE: GEOLOGIS	MBI	R: FCM -TW	11			
		COMPA			<u>7398 </u>		GEOLOGIS	T·	6-28-60				
	LING				YCITA		DRILLER:	•	D. whalen				
		1	<u> </u>			MAT	ERIAL DESCRIPTION	Ι.		Telen	ID Be		(ppm)
Sample No. and Type or RQD	(FL)	Biows / 5" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened interval	Soil Density/ Consistency or Rock Hardness			U S C S *	Remarks	Sample		Borehole**	
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** Include Rema	monito	r reading in		vals @ bon	ehole, Increas		ng frequency if elevated reponse read.		Drillii Background		-		
Conve	erted to	o Well:		Yes			No Well I.D). #:					

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It	etra	Tech	NUS,	Inc.



Р			NAME NUME		PW I	198	ابعدا	DATE:		BER: ECM-TW1 7-17-00				
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D	RIL	ING	RIG:			ing F	-10	DRILLER:		Mike Pellegrine				
Г							MATER	RIAL DESCRIPTION				D Ree	ding	(P
יני	emple No. and pe or RQD	Depth (Ft.) or Run No.	Blows / ET or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Pt.) or Screened interval	Soil Density Consistenc y of Rock Hardness	Gölor	Material Classification	U % C % •	Remarks_	Outual	F Zg Jajduisg	Borehole*	
		0						Brown - Mixture of Silt		((دوسه)	0	0	Ċ	0
							1 1	read and pebble/gravel						L
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••	Includ	ie mon	itor readir	er rock brong in 6 foo	ot intervals	⊗ borehol	ie. Increa	se reading frequency if elevated repon	se rea	od. Drillin Background الله عمل الله عمل				_
- 17	VIII			phin Not			,	servine cuttines brown	/ <u>L</u>	'I D. I. A	/L.b.	•••/•[-

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	PROJECT NAME: PROJECT NUMBER:					RP Co 1398	lver	ton					UM			4 - Tu	<u> بر د</u>			
	PRO	JECT	NUM	BER:	7	1398					DAT	E:		7	-17-	00				
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	DRIL	LING	RIG:		1.51	ing F					-	LER:		m,	Ke	Pelle				
	Sample No.	Depth (Ft.)	Blows /	Sample Recovery	Lithology Change	N Soll	_	RIAL	- 4-44	44.43	TION		U				PIDA		eding	(ppm)
Tine	and Type or RQD	or Run No.	RQD (%)	Sample Length	(Depth/Ft.) or Screened Interval	Density/ Consistenc Y Or Rock Hardness	Color		Materia	ıl Class	ifficatio		C % •	F	Rema	rks_	aldina.	Sampler BZ	· Borshole**	Differ BZ**
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1	* When	rock co	ring, ente	r rock bro	keness.		<u> </u>											لسسا		
					t intervals HSA	@ b orehole. -	. Increa	ase rea	ding fred	quency i	if elevate	ed repons			Bac	Drilli karound			C	$\overline{}$
			Descr	Phois	(DMAH	cted 6	y o	se e	Vine	Cut	his !	المنبح	F	to 50	rfec	kground و له	A	Sec	يخ	<u> 2</u>
	Conv	erted	to We	'not II:	Yes	CCDL	<u> </u>	No	<u></u>		W	/ell I.D.	#:			-				

Page ___ of ___

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and the same of th	PRO	JECT	NUM	BER:	7	398			DATE:	·-·	7-18-00				
				PANY:		ب تسوا				31:	Vince Shicker				
	DRIL	LING	RIG:		5ने		F-1		DRILLER:		mike Pellegri	<u> 10</u>			
Time	Sample No. and Type or RQD	Depth (FL) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/FL) or Screened interval	Soli Density Consistenc Y Of Rock Handness	Golor			U s C s •	Remarks_	Anul adways	Sampler BZ	**	Differ BZ*g
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		60						Sue 2	esoc -		wer		9	0	٧
and store	•• Inclu	ide mor	nitor readi 3. 25	"X 5"	t intervals HSA	to to	 		ency if elevated repons		d. Drillin Background	(ppr	n):[ريد	\subseteq
	Con	verte	ा to W	net	be a	ecurète	_	No ∠	Well I.D						

Tt	etra	Tech	NUS,	Inc.
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		t	etra T	ech N	JS, Inc	•			В	OF	RIN	G L	OG	ì	· P	age_		of ,	_
کان اور	PRO	JECT	, ΓΝΑΜΙ	E:	Nw1	RP C2	lver	ton						•	BER: ECM-T	د د س	,		
				BER:	7	RP C2 398					D	ATE:		•	7-18-00	*			
				PANY:	Del	12 well	4	Dury	_			EOLC	GIS'	T:]	Vince Shu	torA			
			RIG:		F3	Hay F	-10				D	RILLE	R:	_	mike Pelle	2512	<u>-</u>		
) N	ATF	RIAI	DF	SCF	RIPTION	ON		T				eading	100
	Sample No. and Type on ROD	(Ft) or	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Pt.) or Screened Interval	Solition Density/ Consistenc y Rock Hardness	Color		Mat	eriai C	lassific			บ ธ ร ร	Remarks		Sampler BZ 1	Boneficien	MAN BOW
Time 0743.		D						0		~ 16		. 0 .	.	•	/1 \		T		
0743		D.						Drue	-4 -	S.1F	-> 2~	<u> 2 - Pcb</u>	<u> 1</u>	\dashv	(demp)	0	10	Ü	잍
0747		5						Lyh Fe M	+ Br		-T21	Fire			Moist	0	0	C	υ
6741		10	/					ند.+و	ن∶ې	<u>~e </u>	iverte	pebbl	43	\perp			丄	ot	Ļ
0754		15						Sz.	ne	. કર	ط	oue_			Móist	0	0	2	0
0754		2 0					. ,	Se	<u>u</u>	ટ્ય	.	نابو.			Moist	6	e	G	3
0805		X						Se	ne	ર ડ	ر وا د	عداف			Moist	0	G	0	Ü
08 ³³		<i>3</i> 0			-			Sa	<u>~</u>	ટ્ડ	abs.				moist	0	6	0	0
0814		35						52	Le_	رج	مان	عند			Moist	0	0	G	٥
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0819		40			~~~			C.			iL			\forall	t	- 1		O	
0.1								72	~	<u>es</u>	char	<u> </u>	\top	1	we	18	10		<u> </u>
. 0.2		45						۲,		-3.4	262			\top	wet	1	†_		
0915		73						50			<u> </u>	<u></u>	\dashv		UE!	10	9	8	0
0415		50																	
		1																	
941 <u>7</u>		55												\top		\top	T		
											•			\top		_			
		60			EOB 57'									\top		\top			
			•	r rock bro			:												-
						borehole.					ncy if ele	evated rep	ponse i	read.		lling A			
	Kema	-	3.25		HSF	t to					4			_	Backgrour	ıd (pp	m):	<u>_</u>	
-		_	net	he de	دسماء	- by 6	n (#)	2024		d tra	95 0				Aug by Augo	<u>~~</u>	<u>, a </u>	A.	<u> ۲</u>
	Conv	erted	to We		Yes			No.		X		Well	I.D. #	# :					

A-42



Page _/ of _5

		NAM			P CALV	ERTE	5 <i>i</i>	BORING N	UM	BER: ECM - TW	20			
	PROJECT NUMBER: DRILLING COMPANY: DRILLING RIG:			7358			···.···	DATE: GEOLOGIS	· ·	8/11/00				
			PANY:				Puno	GEOLOGIS	1:	K. 6005				
DRIL	LING	RIG:		FAIL	1134 F-			DRILLER:		MIKE PELLEG				_
Sample No. and Type or RQD	(FL) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened interval	Soil Soll Soll Soll Soll Soll Soll Soll		RIAL DESCRIP Material Class	ifleation.	U s C s ·	Remarks_	POF eadings			Driller BZ** (add
0819	0					MED	FER-MER SAND			A4	0	U	0	
						LT 12121V	ZOUNDED PEB	अत्य		DAMP - MOIST	+-		쒸	-
		<u>/_</u> ,									 -	٠	_	
436-24	5						- AS ABOVE-			MOIST	0	0	C	Ü
0821 0824	3						713 712002							Ť
						_					+			
12825	7			 										
	10					13PW	MGR SAND WY	Some Rawaio		Maist	0	0	0	0
	70					70	PEBBLES							
						GRAY					-			
0828	12	/_		,							-			
0830								·						
											<u> </u>			
	15-					BRU	FGR-MGR WELL	L SURTED		MOIST	0	0	0	0
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0831 0833	17		 	}		├─				,			-	\vdash
0033	<u> </u>					<u> </u>						┞	<u> </u>	
											<u> </u>			
	20] .			BRU	FOR-MOR, WELL SAND, TRACE	CGA SAUS		MOIST	0	0	0	0
							A PEBRLES			·				
			1	1								T		
<i>0</i> 834 <i>0</i> 836	22		┼─	-							+	\vdash	_	-
		/		1							+-	┼	 	
				1		<u> </u>			_			<u> </u>		
	25						- AS ABOVE	_		MOIST	0	0	0	0
			ter rock br		A based of	J :		if alaysted		, Drill	ing A	res		
							ease reading frequency	ii elevaled repons	se (6)	Backgroun	-		_	0
		٦.٤)	u	<u> </u>	LOING	MY					\F-F			
Con	verte	d to W	ell:	Yes	<u> </u>		No .	Well I.D). #:	•				

Converted to Well:

BORING LOG

Page 2 of 5

	ات السيا	, NAMI	Ε,	11	0000			BORING NI	– I fM	BER: ECM - TW	. .			
		NUM		7398	RP CAL	-V:/C	1013	DATE:		8-11-00	20			
					A WELL	5 4 /	PUMP	GEOLOGIS	T:	R. 6009		· · · · · · · · · · · · · · · · · · ·		
		RIG:			1116 F					MINE PELLEGA	WO			
				7 / / / /			RIAL DESCRIP					ID Re	محناء	(000)
Sample No. and Type or RQD	(FL) or	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened interval	Self	Color	Material Cia	silication	U s c s ·	Remarks_	First spanned	Sampler BZ	Morehole**	L Driller BETT 1 1/16
				·		LT	FURTED WYTH	ACE CGA						
0837	27			•			SAND & PERM	शर्ट्ड						
O338														
	30					BRU	- AS ABOVE	r		MOIST	o	O	0	0
							-							
A Cuto	35					LT.	- AS AROU	e _		MOIST-WEF	0	O	0	0
0840	دد					520	713 77,900							
				İ										
										· · · · · · · · · · · · · · · · · · ·				
				모						SATURATED (6) 38' - 38'				
	40			=										
5-1	20	5/5				LT BRN	MGR SAND, SO CGR SAND, A	ME PGR &		SATURATES	0	U	0	0
0852		6/11	18/24"				Rawaea AEZA	kes						
·										PRIVE HYDROPUNCIT TO 45' @ 0405				
	45									ECM - TWZE - 45 - 01 @ 0430				
ડે ઉ		8/9			"	BRIV	- SAME AS A	House -		SATURATED	0	0	0	0
0433		10/14	24"			12.0								
							ę							
	50													
		-	er rock bro		A barabala	la-e-	and seeding frances	if alamad		d. Drillin	α Δ:	· ·		
			-				ase reading frequency	·	- 168	Background	_			2

Well I.D. #:

Page <u>3</u> of <u>5</u>

	JECT	NAMI	⊑ ∙	Alint	00 04		500	BORING NU	JM	BER: ECM-TW	20			
		NUM		7358		-1000	1010	DATE:		8-11-00			**********	—
			PANY:		o wen	¥ P	uns	GEOLOGIS	T:	2.6000				
DRIL	LING	RIG:			ING F			DRILLER:		MIKE PELLEGRIA	vo			
							RIAL DESCRIP					ID Re	gnibe	(ppm)
Sample No. and Type or RQD	(FL)	Blows / 6" or RQD (%)	Sample Recovery / Sample Length		Solt Density Consistenc y Of Rock Hardness	, partie		iffcation	U S C S	Remarks_	Sample	Sampler BZ	் Borshote" ுழ்	🐇 Driller BZ** 1 🙀
5-3	70	7/6				LT	FGR-MGR SAND	W/ TRACE		C	0	U		
0941		\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ 	0#.	1		BRU	COR SAND 9 PEBBLES	iscurses		SATURATED	 	9	0	O
		8/10	8"/24"								 			_
	55										T			
5-4	22	10/				LT.	- AS ABOVE -				0	4		
5-4 @ 0448		11/	24			<i>i</i> ÿzi∪	WELL SORTED PERSLES	W SMALLOR		SATURATED	10	O	0	0
		"	24"/24"			ļ					<u> </u>			
							·					Ш		
										POUR HYDROPHINGS TO 60' (R) 0554				
	60			1						ECM-TWZ0-60-01 @ 1020				
5-5	80	9/1		1		u.	MGR SAND W/ S			•				
1025		1/12	24/			1344	FOUNDED PER			SATURATED	0	0	0	0
		17	24"/24"	1		<u> </u>								Н
L]										
							·							
	65			1			·							
इन् ब्र	ده ا	6				U.	- SAME AS A	4.65		C	0	0		
1035		76	מיים		<u> </u>	2211	3.11-6 713.74	W/C		SAVUNATED	+-	-	0	0
		19	12/24	•							┼		-	
											<u> </u>			
<u> </u>														
	70													
S-7		16/20		1		LT. BRN	20" SANO AS A	Rome		SATURATED	0	0	0	0
1043		21/25	24/24.			1300	2" MICACEONS, VFBR SAN	SILTY,		<i>\$4141,476</i> 3	ا ت	Ĭ		Ť
							2" MICACEONS	CLAYEY			T			
	<u> </u>	1	1	1		 	SILT & TRA	ce VFGA			_	H		$\vdash \vdash \vdash$
 		/		1		-					-			$\vdash \vdash$
<u> </u>	75				L	<u> </u>					<u> </u>			
			er rock br na in 6 foc		@ borehole	. Incre	ease reading frequency	if elevated renones	e rec	d. Drilli r	na A	rea		
								ii didvated tepoliac		Background				
										•				
Conv	verted	to W	eil:	Yes			No/	Well I.D.	#:	,				



Page <u>4</u> of <u>5</u>

		NAM		NWI	RP CAL	LVEI	BORING N	IUM	BER: ECM-TW	20			
		NUM		73 98			DATE:		8-11-00				
DRIL	LING	COM	PANY:	DELTA	WELL	8 1			R. 6000				
DRIL	LING	RIG:		FAIL	1126 F			:	MIKE PELLEGA	120			
Sample No. and Type or RQD	(FL) or	Blows / 6" or RQD (%)	Sample Recovery / Sample Langth	Lithology Change (Depth/PL) or Screened Interval	Soli Soli Soli Soli Soli Soli Soli Soli		RIAL DESCRIPTION Material Classification	U S C S	Remarks_	- Seman	Sampler BZ	is Borehole** 1	E Dritter BZ** 1. B
%-₹ @		20/22				LT. GRAY	6" SILTY MKALEOUS, FOR		SATURATEO	0	O	0	0
1054		26/30	18"/24"	·		0/6/1	6" PUTTY-COLONES SILTY CLAY			1			
		7					Y" MGR-CGR, POURLY SONTED.			1			
							RUSTY STAINED SAND & GANVEL 2" VEGR-FGA, MICACEONS		Onive HYORGANAKH PU 80' 6) HOC				
	80						SILTY SAND,		ECM-TW20-80-U, (E) 1/22	T			П
5-ÿ @		10/1				LT. Biles	MGR SAND, SOME CGR- SAND & ROUNDED		SATHRATEO	0	0	O	٥
1128		12/11	20/24"				PEBLIES			<u> </u>			
		/_						_					
		/								╀			
S-10	8 5	/				15	15" TO 1" ROWNSES PERRIE			╀			
270 (B)		17/18		*		Bin	GRAVEL MY MGA - CGA SAND PEBRIET ARE		SATURATED	0	0	0	0
1136		18/24	14"/24"			<u>.</u>	ate, Gusisi Schist &			-			
		_								+-		-	
		_						\vdash		+	_	-	-
S-11	50	10/1		,		LT BRU	10" GRAVEL AS ABOVE 1" CLAYEY SILT LAYER		SATURATED	0	0	0	0
@) · 1147		10/1	24"/24"			1,500	13" FER WELL SORTED SAND			1			
	-												
	45						:		<u> </u>				
S-12 @		16/18				BED	SILTY CLMY WY A FEW VERY THIN SANDY		SATURATED	0	0	0	0
//55		19/23	20"/24"				LATERS						
		\angle							20	igspace		_	
		\angle							DAIVE HYDROPUNCH TO 100' @ 1202 ECM-TW 20 - 100-01				
	100								6 /235				
** Includ	de moni	tor readin	-	t intervals			ase reading frequency if elevated repons	se rea	d. Drillii Background	-	4	0	
Conv	erted	to We	ell:	Yes			No Well I.D	. #:	,				



Page <u>5</u> of <u>5</u>

PRO	JECT	NAM	Ξ:	NWI	RP CAL	vers	72W	BORING N	UM	BER: Ecm - Two	0			
		NUM		7358				DATE:		8-11-00				_
DRIL	LING	COM	PANY:	DELTA	weu	4 /	runp	GEOLOGIS	ST:	R. 6000				
DRIL	LING	RIG:		FAIL	NL F-	10		DRILLER:		MIKE PELLEGA	100			
Sample No. and Type or RQD	(FL)	Blows / 6 or RQD (%)	Sample Recovery / Sample Length		Soli Density/ Consistenc Y or		Material Class	fication	3 % C % •	Remarks_	Sumple	11		Orither Bare 1 1/2 3
	100	•		Interval	Rock Herdness									
5-11 ©		5/6	1			MED -OK	SILTY FOR SAND SILTY - CLAYE			SATUMTED	0	ပ	0	Ö
1241		6	24"			BAN	SAWD LAGERS	Somo P						
		10	154.				PEBBLY LAYE.	25		*				\dashv
		<u> </u>												
	20.5													
5-14	105	8 /		ł		MED	SILTY FOR SAN	o y some		C 4	<i>i</i> .			
5-14 @		19				-OK BRN	PEBRLES			SATURATED	0	0	O	0
1250		10/13	24 /24"			<u> </u>					<u> </u>			
						GRAY	6" SILTY-CLAYS SAND W/ A FE							
				1										
				-							 			\dashv
	110			ļ							<u></u>			\Box
545 @		10/11				MEO -OK	SILTY-CLAYEY F W Some Row			SATARITED	0	0	0	0.
13a		10/1	20"/24"	1		61244	PEBBLES							
					•									
-														
-					<u> </u>									
5-16	115	68				MEO -OK	- Same As As	ove —		SATURATED	O	0	O	0
<u>®</u> 1308		8	24"/24"	1		6214								
-		1	//	1										
			 	1		-				DRIVE HYDROPUNCH	-			
ļ				-{		┼				SAMPLET D 120 6 1314 BCM-TW20-120-01	-	\vdash		
	120			1						@ 1340				
				1						,				
 		1		1		<u> </u>						П		П
-	-			1		\vdash					 	H		H
<u> </u>		/	-	4		-					<u> </u>	\vdash	-	$oldsymbol{arphi}$
]	<u> </u>					<u> </u>			
			er rock br		A harehal	. l	naga raadina francos	if alaunted sons		d. Drillin	Δ	rea		
							ease reading frequency			Background	_			, –
1/611	iai NJ.	7167	10.	KY.A	Y C	يام	C SPOONS DI	.rct 10 /13 /2			\PP			
Con	verte	to W	ell:	Yes			No -	Well I.D	. #:					

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	PRO	JECT	NAMI	E:	MU	RP C	<u> 2 </u>	erton_		UM	BER: ECM			1		
			NUM			7398			DATE:	· ·	8-1	4-00				
				PANY:		اءِ ٧٠		+ Pump		SI:	VINCE !					
-	DRIL	LING	RIG:		<u></u>	بابعم		10	DRILLER:		Mike		,			
Tine_	Sample No. and Type or RQD	Depth (FL) or Run No.	Blows / ET or RQD (%)	Sample Recovery) Sample Length	Lithology Change (Depth/Ft.) or Screened interval	Soll Density/ Consistent	ATE	u u u u u u u u u u u u u u u u u u u	sification	J & C & •	Remark		*	I Sample BZ 1	Formore wife	E Driller BZ** 1, 12
BOD		0						Derk Braun F	- L. N. J		Moist		0	0	0	0
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								grain Sand wit					ᅱ	\dashv	_	-
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		5						Light Brown -	Sere as		moist		0	0	0	O
1002		<u> </u>			'										\Box	
			_										\dashv	寸	ᅥ	
													\dashv	\dashv		\dashv
		8	/_								 		-	\dashv		\dashv
			_		٠,			Light Bram-To	en tracto				_	\dashv		
10c7		10						Medinglån.	Send inthe		noist		0	0	0	0
<u> </u>								Some queste	grevel							
		15						(Som es e	7		moist		5	0	0	
1011	\vdash	13		 -				(Jan 2) 2	oose)		7-10737		1	7	\dashv	Ť
										-			\dashv	\dashv	-	\dashv
1014		<u>20</u>	/,			<u>.</u>		Some as	above		moist		익	의	욕	읙
٠			/,		·								_	_	_	_
1017		25						Some es	boue		moist		0	O	0	0
101																
ď		7.0			,			<u>C</u>	.1 .		<i>*</i>			オ	ユ	コ
1024		<u>30</u>						Sere ds	<u> </u>	\dashv	Moist_		4	9	쒸	의
													-{	\dashv	⇥	\dashv
<u>1027</u>		35	/					Sere	2 hove		moist		의	이	의	의
													\perp			
. 19		40						Light Brown - T	on Fine		1				- 1	1
1029	ŀ	41	66	18%4.	60			To red grain			wet			0	二	
1001	CAS	140	8/8		_			d: 5/ /	0-661-1		<u></u>		+	7	커	ᅱ
								750,121	70,-0				\dashv	十	一	\dashv
		5			-											
				or rock bro ng in 6 foo		@ borehole.	incre	ase reading frequency	if elevated repons	e read	í.	Drilling	Are	ea		
			3.2	5"x .	s' Hs	A -	2 "	x2' Solit	Spoors		Backgr	ound (p	рп	n):[
				S CAP			to	May not by	By observ		cutting.	وسعاه	<u>5</u> †	<u>- </u>	>	
	Conv	erted	to We		Yes			No 🗶	Well I.D.							

Page <u>2</u> of <u>5</u>

	PRO	JEC1	NAME	: :	Nw	IAP	ري	verten	_BORING N	IUM	BER: ECA	h-Tw	21			
and the state of t	PRO	JEC1	NUM	BER:		7348			DATE:			4-00				
	DRIL	LING	COM	PANY:	De	Ita Li	Sell	+ Punp	GEOLOGI	ST: ˌ	Vince:					
	DRIL	LING	RIG:		F2	عدرار	<u>F-</u>	10 '	DRILLER:		Mike	Pelles	50	<u> 20</u>		
							IATE	RIAL DESCRI	PTION			P	IDIPE	Read	ding (ppm)
	Sample No. and Type or RQD	(FL)	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/PL) or Screened interval	Solt Density/ Consistenc y of Rock	Color			5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Remar	ks_	SERIES		: Borehole** : j	- Driller BZ** L. B
لعندس						Herdness										4
1123	2	46	10/1	24/24				Light Bran	- Ten fine							
		47	28/30	-				To Action	grain Sand		wet		0	0	0	0
		48		Auger				Some quest	z pebbles					ightharpoonup		
		49	/	Ĭ									_	_	\dashv	_
1130	_	50		4			ļ						_	\dashv	4	4
1132	3	51	28/30	22%				Some es	Sheve		met	- !	0	0	ଠ	의
		.52	33	_									\dashv	+	\dashv	-
		53		Avjer									-	\dashv	\dashv	_
		54											-	\dashv	+	_
五	.,	55	16,	19/24-	1			<i>C</i> .	i		, ,		S	╁		\neg
1,41	1	<u>56</u>	18/33	124"				Some as	Ebove		wet		9	9	9	٩
		57 58	733	Augar			 						_		\dashv	_
		<i>5</i> 9		1									7	十	\exists	
B 36		60		1												
B38	5	61	18/20	20"/24"				Some es	eboue		wet		0	0	0	0
_	-	62	1921	_									_			
		63		Auger									4	4	_	_
		64		LŤ.									_	4	\dashv	\dashv
1345		65		V									_	+	4	_
1347	6	66	10	124"				Same	200ve		web		의	9	의	2
		67	10/14	-									_	+	+	\dashv
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(69		1			-						-+	+	\dashv	-
1354	* 10/1-	70			1	<u> </u>	<u> </u>	L								
11.162				er rock bri na in 6 foc		@ borehole	, Incre	ease reading frequenc	cy if elevated repons	se res	d.	Drilling	Ап	ea		
	Rem		_	وح ۹	revia	· Pages					Back	around (חממ		0	
			- Hy	305	och Se	mpres a	والصا	ected of 45		_	80 Ret 10	s rec		<u> </u>		_
	Conv	ertec	to We		Yes			No X	Well I.D	. #:						

Page <u>3</u> of <u>5</u>

	PRO	JECT	NAME	: :	Nwi	ERP C	اد	verton		UME	BER: Ecm		<u>21</u>			
	PRO	JECT	NUMI	BER:		7398			DATE:			4-00	-			
	DRIL	LING	COM	PANY:	<u> </u>	1/2 W	حلا	+ Pump	GEOLOGI	51: _	Vince					
	DRIL	LING	RIG:		<u> </u>	كالنصم		-10	DRILLER:		M.KZ		7			
	Sample No. and Type or RQD	(FL) or	Blows / 6" or RQD (%)	Sample Recovery I Sample Length	Lithology Change (Depth/PL) or Screened Interval	Soli Donaldy Consistenc Y Rock Hardness	ATE	Material	Classification	U \$ C \$ •	Remark			F. Bermpler B.Z.	Borsholen graft	Le Differ Born Neb 3
1356	ユ	71	13/6	17/24"	,			Bown-Tan	Fire to Medium		wet		0	0	د	0
13,			18							П						
		72	حوو	4					with some					寸	\dashv	\Box
		73	/	Auge					our 3" has				\dashv	\dashv	-	-
		74						sit- clay)				_			4
1404		75		1												
1406	8	76	99	184/244				Brang-Tan	fine to med.		wet		0	의	٥	0
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		78		Auger]								1			
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1443		80		1	4								ᅱ		-	
1446	9	81	10/12	21/24"				52me 25			wet		의	의	의	0
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		83		Ayer				with me	not clay							
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1454	<u> </u>	85	9	22%	┨	<u> </u>			Γ.,	-				_		
1456	10	86	1	22% 24	1			Brang-Te	n triatabled		wet		읙	0	٩	쒸
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		88		Augar				querte p	ولمالح							Ш
		89		17	1			1				.	- 1			
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1503 1505	 	90	10/1	247	-			-	1		<u></u>				_	コ
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	<u> </u>	92	10/12				ļ				· · · · · · · · · · · · · · · · · · ·		_	_		Н
		93		Aucos	.]											
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1314	- Whe	n rock o	pring, en	er rock b	rokeness.		<u> </u>	<u> </u>		11						
	** Incl		nitor readi	ing in 6 fo		_	lncr	ease reading freq	uency if elevated repor	se res	d. Backı	Drilling ground (٥	
	Con	verte	d to W	ell:	Yes			No	Well I.I	D. #:						



	PROJECT NAME:				NWIRP Colverton BORING NUMBER: ECM-TW21											
			NUMI			7398			DATE: GEOLOGI	ST: Vince Shickory						
				PANY:		teure	_	+ Pump	_GEOLOGI: DRILLER:	٥١. <u>-</u>						
_	DRIL	LING	RIG:			ling F	-/(, ,	MIKE	Pelleg	، سند	_		_
	Sample No. and Type or RQD	Depth (FL) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/PL) or Screened interval	Solt Deneity/ Consistenc Y Or Rock	Color	RIAL DESCRIF		U S C S ·	Rema		Samole und		in Boreholess age to	
Time		e c	9	16"/		legare.	-9960	Brown-Ten Fin	` L u . l		wet	_	B	0		2
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		los		1								:				
1552	13	101	12/14	15 1/24"				Light Braun	Clavey		wet		0	0	0	0
155	7.7	102	11/	_				Light Braun Silt with	very small							
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		104		L-ĭ										-	_	\dashv
7		105		123%									_	_		\dashv
1003	14	106	74	227/24"				Braun Claye Silt	A-Javah		wet	•	0	의	C	0
		107	6/4	1				5.11					-	_		一
		108		Auger			<u> </u>						-			\dashv
	<u> </u>	159		1	1											一
1609	15	111	5/1	247/11	•			Sene 25	بعبدرط د		wet		0	0	0	0
1611			64	-												
		113		Auger												
		114		1												
1621		115		1	_											
1623	16	116	56		-			Brown - Gra	/ Same	\vdash	wet		0	0	0	0
		N7	67	_	-			23 above						-		H
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Martinesis .		ide moi arks:	,			15 Pzg=		ease reading frequenc	y if elevated repor	Se fe20	Bac	Drilling kground			Σ	
	Con	verte	d to W	ell:	Yes			No	Well I.). #:						

Page <u>5</u> of <u>5</u>

	PRO	JECT	NAM	E:	NW	IRP	اح)	ver	ton		BORING	NUM				21			
			NUM			7398					DATE:				5-0C				
				PANY:		112 L	كولا	4	ung	2	GEOLOG				Shu	Ko	<u> </u>		
	DRIL	LING	RIG:		E	Ellery	<u> </u>				DRILLER	:	M	ike.	Pell	29	<u>~</u>	<u>^</u>	_
						7 N	IATE	RIAL	DES	CRIP	TION]				PIDIF	ID Re	eding	(ppm)
	Sample No. and Type or RQD	Oepth (FL) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change {Depth/FL } or Screened interval	Solida Density Consistenc Y Pock Hardness	Color		Mater		sification	0000.	R	lemar	ks	apple	Sampler BZ	Sombole (4)	The puller Bow Year
0741		121	55	23"/24"				Bran	J4-6	rtev	Sendy		lu	et		c	0	0	O
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0837		126	78	24"/24"				Date	<u></u>	. <	14.01-	T	w	- +-		0	0	0	一
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		de moni	tor readin		intervals	@ borehole.		ase read	ding fre	quency i	f elevated repon	se read		Backg	Drillin ground			0	
	•			•		TJ	-							- 					_
	Conv	erted	to We	II:	Yes .			No _			Well I.). #:							

Tetra Tech NUS, In

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME:	Calverton- Naval Base	WELL ID.: _ ECM- MWO!
PROJECT NUMBER:	4570	DATE: 7/10100

Time	Water Level	Flow	рН	Cond.	Turb.	DO	Temp.	ORP	Comments
(Hrs.) !	(Ft. below TOC)	(mL/Min.)	ઢ્રે(S.U.)ૄ	(mS/cm)	&(UTU)&	(mg/L)	(Celsius)	# (mV)	
1540	31.88	500	45	11	190	9.9	13.1	340	
1545	31.88	700	4.5		190	9.9	13.2	342	
1550	31.89	400	4:5		190	9.8	13.4	3410	
1555	31.88	400	4.5		200	9.8	13.6	348	
1600	31.88	425	4.5	11	210	98	13.6	349	
1405	3188	T 00	4,5		220	9.8	136	. 358	
11010	31.88	400	4.5	11	220	9.7	13.7	354	
11015	3188	400	45		230	9.7	13.6	356	
11020	3188	4100	4.5	11	250	9.7	13.10	357	
1025	31.88	450	45	11	2100	9.7	13.6	359	
1630	31.88	450	4.5		280	9:60	13.4	3101	
1:035	31.88	400	4.5		300	9.7	135	363	
1640	31.88	457)	4.5		310	9.7	13.5	364	
1645	31.88	450	4.5		320	9.5	13.60	3105	
1050	31.88	450	4).5		330	9.5	13.5	31010	
1700	31.88	450	4.4		3.50	96	13.5	367	
1705	31,88	450	4.5		360	95	13.4	367	
1710	31.88	450	4.5	U	370	9.6	13.5	3109	
1715	07.00	450	4.5	11 •	3.90	9.5	13.5	368	
1720	31.88	450	4.5		390	9.5	13.5	368	
1725	31.98	450	4.5		4/10	9.5	13.5	369	
1736	31.88 31.88	450	4.5	4	4,20	9.5	13.5	369	
1735	<u> </u>	450	4.5		4,30	9.5	13.5	370 370	
1740	31 88	450	4.5 4.5		420	9.5	13.5		
1745	31 88	450			H30	9.4	13.4	371	
	51.99	450	4,5		430	9.5	13.5	371	·
1759	Stort Som	piiq							
 									
<u> </u>									<u> </u>
l i									·

SIGNATURE(S): Jessica Laniele

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Tetra 7	Γech NUS,	Inc.
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LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME:	Calverton	WELL ID .: ECM - MWOZ - 0007
PROJECT NUMBER:		DATE: 7/11/00

	Time	Water Level	Flow	рН	Cond.	'Turb.	DO	Temp.	ORP	Comments
	&(Hrs.)	(Ft. below TOC)	(mL/Min.)	ৡ(S.U.) ∦	(mS/cm)	*(NTU)*	(mg/L)	(Celsius)	≨ (mV)§	
Ī	1230	3195	450	5.30	0.131	341	11.64	1330	215	
	/a35	31-9H	450	5:18	0.129	19.5	12-11	1439	192	
	1246	31.94	500	5.15	0-129	14.7	12.17	15.73	1102	
	1250	31.94	500	5.07	0.124	12.8	12-47	15.27	173	
	1255	3194	500	5.05	0.123	12.4	12.53	15.20	179	•
ļ	1300	3194	350	4.99	0.121	9.9	12.29	Mana	184	
	1305	3194	350	4.97	0.121	4.5	12.28	11047	182	
	1310	31.94	350	4.95	0.120	8.5	12.33		179	
	1315	31 94	360	4.95	0.120	8.8	12:32	17.30	179	
	1320	3194	350	495	0.120	8:5	12-43	1713	180	
	7325	3193	450	4.95	0.116	9.2	12.47	17.03	179	
	1330	31.93	400	4.97	0.114	10.1	12.95	17.13	171.	
35	1340	31.93	400	4.99	0.114	10.2	12.101		101	
	1340	31.93	750	5.03	0:114	10:3	12.68	17.60	153	
	1345	31.93	750	5.04	0.113	9.4	12-63	1488	149	
	1350	31.93	700	504	0.113	11:5	12.83		146	
	1355	3193	700	5.05	0.113	14.8	12.93		146.	
	1400	31.93	500	5.05	6.113	17.0		16.68		
ı	1405	3193	450	5.07	0.114	3.5	12.90	16-53	151 151	
	1410 1415		450	5.09		15.5	- A	10.40		
		31,93 31,9 4	H 50	5.10	<u> </u>	13.10	12:30	17:10	151	
	1420	3 47	350	5.17	0.113	14 1	12:17	17.710	151	
	14 30	3194	750	211	0.112	13.5	1247	16.54	1100	
	1435	3194	650	5.15	1.112	15:1	1233	110.50	100	
1	विपेत	3194	650	5.15	1.112	13.0	12.43	110.62	1/81	
	1445	31.94	650.	5.15	1.119	14.8	12.40	110-105	182	
Ì	1450	3/94	450	5.15	77.15	15.3	12.20	10-109	185	
	111110	3194	300	5:110	0.112	1119	11.910	19.12	201	V
\sim	1500	31 94	300	5.17	0.113	10.8	11.98	110.79	211	7508 Stop Purgin

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503 Bain Sampling.

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TBD: To Be Determined

GROUNDWATER SAMPLE LOG SHEET

电子量子掌机 第四周的数据的第三人称单数 有形态

Colverton, Naval Rase Project Site Name: Sample ID No.: Sample Location: Project No.: Sampled By: C.O.C. No.: Domestic Well Data Type of Sample: Monitoring Well Data [] Low Concentration [] Other Well Type: [] QA Sample Type: ∏ High Concentration SAMPLING DATA: 7/10/00 Turbidity DO TBD Color рΗ s.c. Temp. Date: °C NTU Time: 1750 1752 Visual Standard mS/cm mg/l 730 Method: lear Grundfos PURGE DATA: Volume Temp. (C) Turbidity TBD TBD 12 cdiflow Pum Monitor Reading (ppm): O, O Well Casing Diameter & Material 4" PUL Total Well Depth (TD): 42,40 Static Water Level (WL): 31.85 One Casing Volume(gal/L): cm 7/10/00 Start Purge (hrs): End Purge (hrs): Total Purge Time (min): 130 hrs Total Vol. Purged (gal/L): 20 aal SAMPLE COLLECTION INFORMATION: **Container Requirements** Analysis Preservative Collected VACS HOI 3 40 ml byttes OBSERVATIONS / NOTES: Circle if Applicable: Lessica Danieli **Duplicate ID No.:** MS/MSD NIA



TBD: To Be Determined

GROUNDWATER SAMPLE LOG SHEET

Page of Sample ID No.: ECM - MW02-0007 Project Site Name: Calverton Sample Location: Project No.: Sampled By: C.O.C. No.: [] Domestic Well Data Type of Sample: ■ Monitoring Well Data ■ Low Concentration [] Other Well Type: ∏ High Concentration [] QA Sample Type: SAMPLING DATA: TBD 7/1/100 рΗ Temp. **Turbidity** DO Color S.C. Date: ORPAV **°**C NTU Time: 1503 Visual Standard mS/cm mg/l 11.98 5.17 10-113 110.79 10.8 Method: Rodiflaw) 61 undfcs lear PURGE DATA: s.c. Temp. (C) Turbidity Volume рΗ 7111100 Ridiflow Pump Method: Monitor Reading (ppm): 1950 Well Casing Diameter & Material Type: 4" PUC Total Well Depth (TD): 44.50 Static Water Level (WL): 31,92 One Casing Volume(gal/L): 👂 3 Start Purge (hrs): End Purge (hrs): Total Purge Time (min): Total Vol. Purged (gal/L): 2500 SAMPLE COLLECTION INFORMATION: **Container Requirements** Collected Preservative **Analysis** 40 m1 HOL GIASC 1/00 OBSERVATIONS / NOTES: 44150 The pump was set at 40 feet BTOC 31,92 1258 653 Signature(s): Circle if Applicable; **Duplicate ID No.:** MS/MSD



Project Site	Name:	NW	TRP /	alver	tam .	Sample	ID No.:	E/84-T	N07-2-4		
Project No.:			FRP (0	, v e		Location:	₩.	M		
						Sample	-	R	w		
	stic Well Data					, C.O.C. 1					
	ring Well Data					Type of					
	Well Type:	Tlmfora	w mori	foring	well	[X] Lo					
[] QA Sa	mple Type:					[] High Concentration					
SAMPLING DA	TA:					··					
Date: 6/2	35/00	Color	pН	S.C.	Temp.	Turbidity	DO	ORP	Other		
	1378	Visual	Standard	mS/cm	, oC	NTU	mg/l	mV	NA		
Method: ょっぱゃ	ners, fump								,		
PURGE DATA:											
Date: 6/ス	6/00	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other		
	persible fump	0	6.75	111	20.74	196	11.65	83.9			
Monitor Reading	•	1259	5.79	106	17.03	12.5	11.88	243			
	meter & Material	1305	5,29		16.54	0.0	11.32	251			
Type: スピッ		1310	5.12	104	16.29	1.2	11,32	763			
								7			
Total Well Depth		1315	5.02		16.28	0.8	11.38	273			
	vel (WL): 37.64	1320	4.94	104	16.33	0.7	11.20	278.5	<u> </u>		
One Casing Vol	lume(gal/L): (, え	1325	4.90	104	16.39	0.0	((.13	280			
Start Purge (hrs): t <u>ス5</u> 3								<u> </u>		
End Purge (hrs)	1375										
Total Purge Tim	ne (min): (1372										
	ed (gal/L): 32										
SAMPLE COLL		TION:		<u> </u>	<u> </u>			<u> </u>	<u> </u>		
	ECHOR INFORMS										
	Analysis		Preser	vative		Container R	equirements	}	Collected		
		·	Preser	vative					Collected		
	Analysis		Preser	vative			equirements 40 m l				
	Analysis		Preser	vative							
	Analysis		Preser	vative							
	Analysis		Preser	vative							
	Analysis		Preser	vative							
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	Analysis		Preser	vative							
	Analysis		Preser	vative							
	Analysis		Preser	vative							
ORSERVATION	Analysis		Preser	vative							
OBSERVATION	Analysis		Preser	vative							
	Analysis VDC NS / NOTES:			vative							
	NS/NOTES:	1 19	pm			2 X	40m1				
	Analysis VDC NS / NOTES:	1 19	pm		op discha	2 X	40m1				
_	NS/NOTES: purgld a sample of	ad Ig	pm	n pus		2x	40m1				
_	NS/NOTES:	ad Ig	pm	n pus		2x	40m1				
 	NSINOTES: purged a sample of well screen	ad Ig	pm	n pus		2x	40m1				
 	NSINOTES: purged a sample of well screen	ad Ig	pm	n pus		Z X	Y0m1	flo punt			
_	NSINOTES: purged a sample of well screen	ed [g	pm	n pus		Z X	40m1	flo punt			



Project Site Name: NWIRP Calverton Sample ID No .: Project No.: Sample Location: Sampled By: C.O.C. No.: [] Domestic Well Data Monitoring Well Data Type of Sample: -IX Other Well Type: [X] Low Concentration Temporary Menidovina Well I QA Sample Type: ∏ High Concentration SAMPLING DATA: S.C. Date: 6/24/00 Color Нα Temp. **Turbidity** DO ORP Other 1230 Visual Standard mS/cm °C NTU mg/l mVNA Method: Syburgue, pump PURGE DATA: Salinity 6/26/00 DO S Other WL Volume S.C. Temp. (C) Turbidity Date: 16.67 75.2 7.68 176 12.76 Method: Submers, pump 136 0 3377 Monitor Reading (ppm): (75) 7.04 16.06 111 1892 1221 6.05 Well Casing Diameter & Material 16.49 7.2 12.61 1872 200 Type: 2" 54881 5,58 205 720116.16 13.16 2.8 188 Total Well Depth (TD): 60 210 5.47 7200 15.71 17.2 13.37 198 12(5 Static Water Level (WL): 37,64 5.42 71.00 15,94 14.7 13.05 203 One Casing Volume(gal/L): 3,6 1220 5.40 70.00 15.58 3.6 13.20 209.1 Start Purge (hrs): (/50 5.38 71 15.56 0.6 13.46 215 1225 5.38 70 15.55 2.0 220 End Purge (hrs): 1230 13,45 1230 Total Purge Time (min): 90Total Vol. Purged (gal/L): リヤ SAMPLE COLLECTION INFORMATION: Analysis **Container Requirements** Preservative Collected ZX Yomi VOA **OBSERVATIONS / NOTES:** 1190 Start at 7,5 gpm } 12,5 gal - sample coilected from pump discharge - well screen positioned at 55'-60' Circle if Applicable: Signature(s): Doubl Whole MS/MSD **Duplicate ID No.:**



								Page	of
Project Site I Project No.:	Name:	NWIE	P Ca 4570	lverto	<u> </u>	Sample Sample Sample	Location.		w08-1-
☐ Monitor → Other V	Domestic Well Data Monitoring Well Data Other Well Type: QA Sample Type: MPLING DATA:			eving	well	C.O.C. I Type of [X] Lov	C.O.C. No.: Type of Sample: [X] Low Concentration [] High Concentration		
SAMPLING DAT									
Date: 6 / スフ		Color	рН	s.c.	Temp.	Turbidity	DO	ORP	Other
Time: 0 8		Visual	Standard	mS/cm	° C	946	mg/l	63.2	NA NA
Method:	lvofunch	LEVY	6.76	74	72.)	976	8,67	6 3.2	L
Date:		Volume	рН	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:								<u> </u>	
Monitor Reading	(ppm):								
Well Casing Dian									
Type:									
Total Well Depth	(TD):								
Static Water Lev									
One Casing Volu									
Start Purge (hrs)									
End Purge (hrs):					1				
Total Purge Time	·								
Total Vol. Purged									
	ECTION INFORM	ATION:	- 1						
	Analysis		Preser	vative		Container R	equirement	3	Collected
	VOC		 		<u> </u>	3×40) m [
			 						
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OBSERVATION	S / NOTES:					· · · · · · · · · · · · · · · · · · ·		:	
	- Hydr	- 40 k	6 0	٠	455.5°	47.51 ha	٠.ς		
	11400	Yourn	2 (45	en a	4 2 1 7	, , ,			
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MS/MSD	Duplicate ID No	.:		•		1.	\ //	while	
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Project No.: Domestic Well Data Sampled By: Co.C. No.: Type of Samplet Sy. Co.C. No.: Ty	Sampled By: COC No: Monitoring Well Data Scother Well Type: DAS ample Type: DI GA Sample Type: Di High Concentration Date: L/27/DD Visual Sandard ms/cm Visu		2 -p 15 140.	•				\ \text{\begin{align*} \text{\pi} \\ \	brull W	Kelen	
Project No.: Domestic Well Data Sampled By: C.O.C. No.: Type of Sampled By: C.O.C. No.: T	Project No.: Domestic Well Data Sampled By: Dv C.O.C. No.: Type of Sampled Sy: Dv C.O.C. No.: Type of Sampled Sy: Dv C.O.C. No.: Type of Sampled Sy: Dv C.O.C. No.: Type of Sample: Standard Monthoring Well Type: It Low Concentration It High Concentration	MS/MSD	Duplicate ID No.	:						11	
Project No.: Domestic Well Data Monitoring Well Data Scampled By: C.O.C. No.: C.O.C. No.: Type of Sample: IX Low Concentration High Concentra	Project No.: Project No.: Sample Location: Sampled By:	Circle if Applic	able:					Signature(s)):		
Project No.: Domestic Well Data Monitoring Well Data Scampled By: C.O.C. No.: C.O.C. No.: Type of Sample: IX Low Concentration High Concentra	Project No.: Domestic Well Data Sampled By: C.O.C. No.: Type of Sample: Sampled By: C.O.C. No.: Type of Sample: Sampled By: C.O.C. No.: Type of Sample: Sampled By: C.O.C. No.: Type of Sample: Sampled By: C.O.C. No.: Type of Sample: Sampled By: Sc. Temp. Turbidity DO ORP Other Sampled By: Sampled By: Sc. Temp. Turbidity DO ORP Other Sampled By:										
Project No.: Domestic Well Data Monitoring Well Data Scampled By: C.O.C. No.: C.O.C. No.: Type of Sample: IX Low Concentration High Concentra	Project No.: Domestic Well Data Sampled By: C.O.C. No.: Type of Sample: Sampled By: C.O.C. No.: Type of Sample: Sampled By: C.O.C. No.: Type of Sample: Sampled By: C.O.C. No.: Type of Sample: Sampled By: C.O.C. No.: Type of Sample: Sampled By: Sc. Temp. Turbidity DO ORP Other Sampled By: Sampled By: Sc. Temp. Turbidity DO ORP Other Sampled By:										
Project No.: Domestic Well Data	Project No.: Domestic Well Data		Hydro	funch s	crlln	a+ 6	3-64'	bgs			
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Project No.: Sample Location: Sampled By: Dw C.O.C. No.: Type of Sample: [X] Low Concentration High Concentra	Project No.: Sample Location: Sampled By: Dw				Preser	vative		Container Ro	equirement	B	Collected
Project No.: Sample Location: Sampled By: Dw	Project No.: Sample Location: Sampled By: Dw			ATION:						<u> </u>	
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Project No.: Sample Location: Sampled By: Dw	Project No.: Sample Location: Sampled By: Dw									 	<u> </u>
Project No.: Sample Location: Sampled By: Dw C.O.C. No.: Type of Sample: [X] Low Concentration High Concentration High Concentration High Concentration High Concentration NA Method: Hydroproch I. Brin 6.57 7 7 7 7 7 7 7 7 7	Project No.: Sample Location: Sampled By: C.O.C. No.: Type of Sample: Type of Sample: [X] Low Concentration High Concentration High Concentration High Concentration High Concentration NTU mg/I mV NA									—	
Project No.: Sample Location: Sampled By: C.O.C. No.: Type of Sample: [X] Low Concentration High Concentration High Concentration High Concentration High Concentration SAMPLING DATA: Standard mS/cm OC NTU mg/l mV NA Method: Hydrofrack I. Bru 6.57 7 7 7 7 7 7 7 7 7	Project No.: Sample Location: Sampled By: Dw C.O.C. No.: Type of Sample: [X] Low Concentration [] High Concentration [] High Concentration [] High Concentration [] High Concentration [] High Concentration [] High Concentration [] High Concentration [] High Concentration [] High Concentration [] High Concentration [] High Concentration [] High Concentration [] High Concentration Maximum Maxi		· · · · · · · · · · · · · · · · · · ·							ļ	
Project No.: Sample Location: Sampled By: Dw C.O.C. No.: Type of Sample: [X] Low Concentration High	Project No.: Sample Location: Sampled By: C.O.C. No.: Type of Sample: [X] Low Concentration [] High Concentration SAMPLING DATA: Date: 6/27/00 Color pH S.C. Temp. Turbidity DO ORP Other Wisual Standard mS/cm °C NTU mg/l mV NA Method: #University Do Salinity Other PURGE DATA: Date: Volume pH S.C. Temp. (C) Turbidity DO Salinity Other Method: Monitor Reading (ppm): Well Casing Diameter & Material Type:									<u> </u>	
Project No.: Sample Location: Sampled By: Dw C.O.C. No.: Type of Sample: [X] Low Concentration High Concentration High Concentration High Concentration High Concentration Method: Lydrofrach L. Ern 6.57 7 7 7 7 7 7 7 7 7	Project No.: Sample Location: Sampled By: Dw C.O.C. No.: Type of Sample: [X] Low Concentration High Concentration High Concentration High Concentration High Concentration Method: Lydrofrach L. Ern 6.57 7 7 7 7 7 7 7 7 7	Total Well Depti	h (TD):							<u> </u>	ļ
Project No.: Sample Location: Sampled By: Dw C.O.C. No.: Type of Sample: [X] Low Concentration [Monitoring Well Data F.O.C. Type of Sample: [X] Low Concentration [Monitoring Data: Color Date: 6/27/80	Project No.: Sample Location: Sampled By: Dw C.O.C. No.: Type of Sample: [X] Low Concentration [Monitoring Well Data F.Other Well Type: Light Concentration [Monitoring Well Type: Light Conc	Туре:									
Sample Location: Sampled By: Dw C.O.C. No.: Type of Sample: [X] Low Concentration [] High Concentration [] Hig	Project No.: Sample Location: Sampled By: Dw C.O.C. No.: Monitoring Well Data Type of Sample: [X] Low Concentration High Concentration QA Sample Type: Lydrofon	Well Casing Dia	meter & Material								
Project No.: Sample Location: Sampled By: Dw	Project No.: Sample Location: Sampled By: Dw	Monitor Reading	g (ppm):								
Project No.: Sample Location: Sampled By: C.O.C. No.: Type of Sample: [X] Low Concentration [Adv. Junch [Adv	Project No.: Sample Location: Sampled By: C.O.C. No.: Type of Sample: [X] Low Concentration [A Sample Type: [A Sample Type: [A Sample Type: [A Sample Type: [A Sample Type: [A Sample Type: [A Sample Type: [A Sample Type: [A Sample Type of Sample: [A	Method:									
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Project No.: Sample Location: Sampled By: C.O.C. No.: Monitoring Well Data Color ph S.C. Temp. Turbidity DO ORP Other Time: 0955 Visual Standard mS/cm CONTU mg/l mV NA	Project No.: Sample Location: Sampled By: C.O.C. No.: [] Monitoring Well Data [] Monitoring Well Data Type of Sample: [X] Low Concentration [] High Concentration SAMPLING DATA: Date: 6/27/00 Color pH S.C. Temp. Turbidity DO ORP Other Time: 0955 Visual Standard mS/cm °C NTU mg/l mV NA	PURGE DATA:	AVE PERE			L 7					
Project No.: Sample Location: Sampled By: C.O.C. No.: Type of Sample: [X] Low Concentration [Advarded By: [X] Low Concentration [Advarded By: [X] Low Concentration [Advarded By: [X] Low Concentration [Advarded By: [X] Low Concentration	Project No.: Sample Location: Sampled By: C.O.C. No.: Monitoring Well Data Color ph S.C. Temp. Turbidity DO ORP Other	Method: 41							************	 -	
Project No.: Sample Location: Sampled By: C.O.C. No.: Monitoring Well Data Type of Sample: COther Well Type: Advocation: [X] Low Concentration High Concentration SAMPLING DATA:	Project No.: Sample Location: Sampled By: C.O.C. No.: Monitoring Well Data Type of Sample: Y. Other Well Type: QA Sample Type: High Concentration High Concentration		7/80 ACT	4		1			1		
Project No.: Sample Location: Sampled By: C.O.C. No.: Monitoring Well Data Type of Sample: Cher Well Type: Advance [X] Low Concentration	Project No.: Sample Location: Sampled By: C.O.C. No.: Monitoring Well Data Type of Sample: Concentration										
Project No.: Sample Location: Sampled By:	Project No.: Sample Location: Sampled By:	[] Monito	oring Well Data Well Type:	h4	Iropunz	<u>L</u>		Type of [X] Lov	Sample: w Concent		
Project No.	Project No.					-		Sample	d By:	Dv	√
Droinet Cité Nome: 14 wro 6 / 1 1 Comple ID No				-NWI	RP Ca	elverto	?h				



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Project Site Name: Project No.:	NWIR	PCal	vertoi	2	Sample ID No.: ECM-Two9-L Sample Location: Sampled By: D. whalen					
[] Domestic Well Dat [] Monitoring Well Da	ata	opruch			C.O.C. I Type of [X] Lo	C.O.C. No.: Type of Sample: [X] Low Concentration [] High Concentration				
SAMPLING DATA:										
Date: 6/27/00	Color	pН	S.C.	Temp.	Turbidity	DO	ORP	Other		
Time: 1475	Visual	Standard		°C	NTU	mg/l	mV	NA NA		
Method: Hydrofunch	Janay	6.21	203	22.97	1)32	4.17	- 37.3	TREM		
PURGE DATÁ:		T	Т	T(0)		T 50	T	Other		
Date:	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other		
Method:	\rightarrow	 				ļ	 	 		
Monitor Reading (ppm):	\longrightarrow		 				<u> </u>			
Well Casing Diameter & Mater Type:	ial									
Total Well Depth (TD):										
Static Water Level (WL):							T			
One Casing Volume(gal/L):		†								
Start Purge (hrs):										
End Purge (hrs):	<u> </u>									
Total Purge Time (min):		†					u			
Total Vol. Purged (gal/L):		 	 			 	 \			
SAMPLE COLLECTION INFO	ORMATION:		<u> </u>			<u></u>				
Analysis		Preser	rvative		Container F	Requirement	\$	Collected		
Voc					2 54	Dml				
								<u> </u>		
		<u> </u>						ļ		
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		+		 						
		+	<u></u>							
		 		†		· · · · · · · · · · · · · · · · · · ·				
OBSERVATIONS / NOTES:										
1	Hydropunc	h sere	en at	43'-4	4' bgs					
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		-			* 0'===+					
Circle if Applicable:					Signature(s):	ΛΛ			
MS/MSD Duplicate II	D No.:			•	X) and	Vlola			



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Project Site Project No.:		NWIR	P Ca	lvento	, n	•	ID No.: Location:	ECM-T	K-Z-POW
						Sample	d By:	D.W	
- ⊷	stic Well Data					C.O.C. 1		· .	
	ring Well Data						Sample:	1.	
	Well Type:	hydro	funch				w Concenti		
[] QA Sa	mple Type:					[] High	Concentra	ation	
SAMPLING DA	TA:								
	77-00	Color	pН	s.c.	Temp.	Turbidity	DO	ORP	Other
	510	Visual	Standard	mS/cm	°C	NTU	mg/i	mV	NA
Method: [4]		1. Brown	6.06	181	(8.84	563	6.86	7.0	
PURGE DATA:	YE PUNE W	I. O. TOWN	10.06		1 (0.0 (0.00	7.0	
Date:		Volume	Нq	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:		10.00.00	Pr.	3.5.	70p. (0)	1			
			 						
Monitor Reading		<u> </u>		<u> </u>		<u> </u>			
Well Casing Dia	meter & Material								
Туре:									
Total Well Depth	h (TD):						<u> </u>		
Static Water Lev	vel (WL):								•
One Casing Vol	ume(gal/L):								
Start Purge (hrs									
End Purge (hrs)):							/	
Total Purge Tim									
Total Vol. Purge									
	ECTION INFORM	ATION:	<u> </u>	<u> </u>	1			<u> </u>	
	Analysis	-	Preser	vative		Container R	equirements		Collected
	VOC					2×40	m l		
OBSERVATION	NS / NOTES:								
OBSERVATION		, funch		a+ .	58-59'	bgs			
OBSERVATION		, funch		at	58-59'	bgs			
OBSERVATION		o funch.		at .	58-59"	bgs			
OBSERVATION		o, funch		at	58-59'	bgs			
OBSERVATION		, funch		at	58-59'	bgs			
	Hydra	, funch.		at	58-59'	bgs			
OBSERVATION	Hydra	, funch		at	58-59'	Cinnahumla):		
	Hydra			at .	58-59'	Cinnahumla): on Id	Whalen	



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Project Site Name: Project No.:	NWI	29 (a	lverto	и		Location:	ECM-TO	v 10-1-
Domestic Well Data					Sampled C.O.C. N		_ D w	
Monitoring Well Data		•			Type of			
Other Well Type:	hy:	drefund	: h			v Concent		•
[] QA Sample Type:					U High	Concentr	ation	
AMPLING DATA:								
ate: 6/28/00	Color	pН	S.C.	Temp.	Turbidity	DO	ORP	Other
me: 0940	Visual	Standard	mS/cm	°C	· NTU	mg/l	mV	NA NA
ethod: Hydrogruch	Gray-Brn	[6.1]	98	18.59	607	8.29	30.1	
URGE DATA:		T		T (0)	*		Calinit.	Other
ate:	Volume	pН	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
ethod:							<u> </u>	
onitor Reading (ppm):	<u> </u>						<u> </u>	<u> </u>
/ell Casing Diameter & Material							ļ	
ype:	<u> </u>							<u> </u>
otal Well Depth (TD):								
tatic Water Level (WL):								
one Casing Volume(gal/L):								
tart Purge (hrs):								
nd Purge (hrs):								
otal Purge Time (min):								
otal Vol. Purged (gal/L):	†						•	
AMPLE COLLECTION INFORM	ATION:		·	4				
Analysis		Preser	vative		Container R	equirement	S	Collected
Voc					2×40 m	.1		
								<u> </u>
		 		<u> </u>				<u> </u>
	, ,	 						
		 						
				 				
		†						
		1						
		L						
OBSERVATIONS/NOTES:	h scrll	n at	48'-	-49'69	\$			
OBSERVATIONS/NOTES: Hydropunc	h screl	n at	48-	-49'69	ş			
	h scrll	n at	48-	49'69	\$			
	h scrll	n at	48-	49'69	\$			
	h scrll	n at	48'-	.49'69	\$			
	h scrll	n at	48-	49'69	\$			
	h scree	n at	48	49'69	Signature(s	s):		



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Project Site Name: Project No.:	NWIR	P Cal	verton		Sample Sample Sample	ID No.: Location:	ECM-T	W10-2-
[] Domestic Well Data [] Monitoring Well Data ∰ Other Well Type: [] QA Sample Type:	Hyd	lvofunc	4		C.O.C. No.: Type of Sample: [X] Low Concentration [] High Concentration			-
SAMPLING DATA:								
Date: 6/28/00	Color	pН	S.C.	Temp.	Turbidity	DO	ORP	Other
ime: 1030	Visual	Standard	 	°C	NTU	mg/l	mV	NA
Method: Hydrofunch	Brown	6.11	71.0	16.52	1714	8.60	1-6.2	
	jt-l		s.c.	T (C)	Turbidity	DO	Salinity	Other
Pate:	Volume	pН	3.C.	Temp. (C)	Turbidity	00	Samily	Other
Method:	\longrightarrow		-	-			 	
Monitor Reading (ppm):	 	\rightarrow						
Vell Casing Diameter & Material Type:								
otal Well Depth (TD):							<u> </u>	
Static Water Level (WL):								<u> </u>
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):		1						
SAMPLE COLLECTION INFORM	ATION:	<u> </u>	<u> </u>	· .				
Analysis		Preser	vative		Container R	equirements		Collected
Voc				-	2×40.	<u>m (</u>		V
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		1		<u> </u>				<u> </u>
OBSERVATIONS / NOTES:				. · · · · · · · · · · · · · · · · · · ·				
	funch sc	cullu i	at 6	3'-64'	s و ط			
Circle if Applicable:					Signature(s):		
MS/MSD Duplicate ID No.					•	•		
mornios Dupilicate ID NO.						Donald w	Halen	



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Project Site Project No.:		N	rtre c	Calver	ton	Sample Sample	ID No.: Location:	ECM-	W - - 0
[] Domes	stic Well Data ring Well Data			r		Samples C.O.C. N Type of	No.: Sample:		
	Well Type:	hyd	vo june	h			w Concent		
[] QA Sa	mple Type:					и підп	Concentr	ation	
SAMPLING DA	TA:		- 1170						
Date: 6	-28-00	Color	рН	s.c.	Temp.	Turbidity	. DO	ORP	Other
Time:	5-28-00 348	Visual	Standard	mS/cm	° C	NTU	mg/l	mV	NA
Method: H	dropinch	14. }rn	6.77	91	21.43	419	6.07	-48.3	
PURGE DATA:		,							
Date:	·	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:			(
Monitor Reading	g (ppm):			•					
Well Casing Dia	meter & Material								
Туре:									
Total Well Depth	h (TD):								
Static Water Lev	vel (WL):								
One Casing Vol								<u> </u>	
Start Purge (hrs									
End Purge (hrs)		 	<u> </u>	<u> </u>					
Total Purge Tim		 	 			`	_	\	
Total Vol. Purge		1							
	SU LUGILLI.								
		ATION:	<u> </u>						
	ECTION INFORM	ATION:	Preser	vative		Container R	equirement	5	Collected
		ATION:	Preser	vative		Container R		S .	Collected
	ECTION INFORM/ Analysis	ATION:	Preser	vative		Container R		5	Collected
	ECTION INFORM/ Analysis	ATION:	Preser	vative				5	Collected
	ECTION INFORM/ Analysis	ATION:	Preser	vative				5	Collected
	ECTION INFORM/ Analysis	ATION:	Preser	vative				5	Collected
	ECTION INFORM/ Analysis	ATION:	Preser	vative				5	Collected
	ECTION INFORM/ Analysis	ATION:	Preser	vative				5	Collected
	ECTION INFORM/ Analysis	ATION:	Preser	vative				5	Collected
	ECTION INFORM/ Analysis	ATION:	Preser	vative				5	Collected
	ECTION INFORM/ Analysis	ATION:	Preser	vative				5	Collected
	ECTION INFORM/ Analysis	ATION:	Preser	vative				5	Collected
	ECTION INFORM/ Analysis VOC	ATION:	Preser	vative				5	Collected
SAMPLE COLL	Analysis VCC					2 × 40		5	Collected
SAMPLE COLL	Analysis VCC				8-49'	2 × 40		5	Collected
SAMPLE COLL	Analysis VCC				8'-49'	2 × 40		5	Collected
SAMPLE COLL	Analysis VCC				8'-49'	2 × 40		5	Collected
SAMPLE COLL	Analysis VCC				8'- 49'	2 × 40		5	Collected
SAMPLE COLL	Analysis VCC				8-49'	2 × 40			Collected
OBSERVATION	Analysis VCC NS/NOTES: Hydnop				s'- 49'	2 4 4	2 m l	5	Collected
SAMPLE COLL	Analysis VCC NS/NOTES: Hydnop	onch sc			8'-49'	2 x y):	d Whal	



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Collected
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Project Site Name: Project No.:	NwIRP 739	Glver 18	ten		Sample	Location:	50.00	2-01-35 Area
Domestic Well Data Monitoring Well Data Other Well Type: QA Sample Type:	Tenpos	ery w	ા!		[X] Lo			Sh. KorA
SAMPLING DATA:	on apply to a confidence	andre explored as	W05344	signification (Contract	ria di matalan ministrati matalan			man mand to a selective control
Date: 7-17-00	Color	На	s.c.	Temp.	Turbidity	DO	ORP	
Time: 0940	Visual	Standard	mS/cm	°C	NTU		mV	Other
Method: Hydropunch	very chowey	6.41	76.3	17.4	988	me/1 6.2	120	NA
PURGE DATA:	Sikjangaret i er							
Date: N/A	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:					1			
Monitor Reading (ppm):								
Well Casing Diameter & Material								
		-						
Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):						-		
Total Purge Time (min):								
Total Vol. Purged (gal/L):								
SAMPLE COLLECTION INFORMAT	ION:	dalaga (da)	v - 256	. Caji Majara Agara .	the tribute of the	Maria S		
Analysis		Preserv	ative		Container Re	quirements		Collected
Vocs		HC		401	MI Visk (メ ス)		2
								
					· .			
								
		·		·				
					····			
	.							
OBSERVATIONS / NOTES:								s Age of All All
- Hydropunch Suplar	set et d	lepte o	F 35	feet BG	. This is	врогох	, nistely	, 5 Ret
below water table	of 30	fee t B	45.		•	·		
Slight is show some	ا میک مم	Bear	ofew f	- used	R- field	Dipa	1	,
below water table * Slight oily show seen - No odor or elevated	DIA	المركون الم		o o dec	100 1.016	, p., e. a.	703	
po ocer er eleveree	. 170 4	دودامع	5BSe/	vee	,			
Circle if Applicable:				1	Signature(s):	•		
MS/MSD Duplicate ID No.:						100		· ·
- -		ž ⁱ			LY	17		, I
L					- ,			



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Project Site Name: Project No.: Domestic Well Data	NWIAP 73	<u>Celve</u> 98	ton		Sample Sample Sample C.O.C.	ID No.: Location: d By: No.:	ECM-TWIS ECM A Vince S	n-02-50 rel hickord
Monitoring Well Data★ Other Well Type:	Tenpo	sery u	Jell		Type of	Sample: w Concen	tration	
[] QA Sample Type:					[] Higl	n Concenti	ration	
SAMPLING DATA:	egen kangingan di digapenag	reneway photographics .					_w>>> }_	
Date: 7-17-00	Color	рН	s.c.	Temp.	Turbidity	DO	ORP	Other
Time: 1035	Visual	Standard		°C	NTU	mg/l	mV ·	NA NA
Method: Hydrogunch PURGE DATA:	Cloudy	6.26	30.9	17.0	210	8.4	200	
Date: N/A	Volume	7	I	T (C)		DO		Other
Method:	Volume	pH	S.C.	Temp. (C)	Turbidity	- 60	Salinity	COR
Monitor Reading (ppm):								
Well Casing Diameter & Material		+-						
Type:								
Total Well Depth (TD):		1						
Static Water Level (WL):	 							
One Casing Volume(gal/L):	 					$\overline{}$		
Start Purge (hrs):	t							
End Purge (hrs):		1						
Total Purge Time (min):	<u> </u>							
Total Vol. Purged (gal/L):	 	†						
SAMPLE COLLECTION INFORMA	TION:	14 April 1990	preside	- Selephore -	Alegair eaklik	Property of the second	100	
Analysis		Presen	/ative		Container Re	quirements		Collected
VOCs		HC	<u> </u>	40 M	1 VIELS (X2)		2
		-						
		 						
		 						
		-						
·	<u></u>							
	····	 						
		<u></u>					 	
OBSERVATIONS / NOTES:								Algorithm (A. 19
-Hydropunch Sempler Below Water table of	set at	depth o	f 50	Ret BES	s this is	approxim	nately 2	whet
- No odors, stains, a	ا _ رمام ح	LJ PT	n Real	4601	- I	•		
- 40 , 3 10173 , 8	i tiwe	, · · · ·		ob	served		,	
•			2					
·			,		•			
Circle if Applicable:					Signature(s):	•		
MS/MSD Duplicate ID No.:		-			1.11	157		
	_				win			



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Project Site Name:	NWIRF	? Celu	eta		Sample	ID No.:	ECM-TW/3	-01-35
Project No.:	7:	398				Location:	ECM Are Vince Sh	
[•	Sample	•	Vince Sh	icksA
Domestic Well Data					<u>C</u> .O.C.			·
[] Monitoring Well Data		. \	11			Sample:		
XLOther Well Type: [] QA Sample Type:	1 Enpe	iss W	<u>e11</u>			w Concen		
U WA Sample Type.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				_ [] Liliði	h Concent	rauon	-
SAMPLING DATA:	and the second	papagai si eppika	11.2 化单级键	S HÜ DESKÜLLE	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1			
Date: 7-17-00	Color	pН	s.c.	Temp.	Turbidity	DO	ORP	Other
Time: 1346	Visual	Standard	mS/cm	°C	NTU	mg/l	nsV	NA
Method: 1todcolunch	cloudy	5.94	48.5	20.1	750	6.7	176	
PURGE DATA:	in digging a	· particle Company	entra entra	tures of the		Pro- Lagrangian (Co.) (a) party		
Date: M	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:								
Monitor Reading (ppm):	 	1		†····				<u> </u>
Well Casing Diameter & Material		†					 	
		+	 	 			+	
Type:	1	+	 	 			-	
Total Well Depth (TD):	 				-		 	
Static Water Level (WL):	 	-		 	ļ <u>.</u>		 	
One Casing Volume(gal/L):	ļ							
Start Purge (hrs):	<u> </u>							···
End Purge (hrs):	<u> </u>							
Total Purge Time (min):					·			
Total Vol. Purged (gal/L):								
SAMPLE COLLECTION INFORMA	TION:	Frankling .	404	ly September 1995 -	A Security of the second		- 14	
Analysis		Preserv	/ative		Container Re	quirements		Collected
Voc,		HC	4	401	41 Veels	(x		_ ユ
				<u> </u>				
								
W		 		<u> </u>				
		 					———	
		 						
		 		 				
		 						
			-					
		 			· · · · · · · · · · · · · · · · · · ·			
		<u> </u>		<u> </u>		· · · · · · · · · · · · · · · · · · ·		
OBSERVATIONS / NOTES:								e stylic for the
- Hydropunch Scaple Below water table	- Set	عالم ماء	ate of	75 F-	1- BG5	† 7		< C . L
Alambela	, F 3.	C F	RLS	33 (CE	1 040.	1413 13	London A	s rer
- Poodars, steins, or	elevele	e pic) Reci	circs obs	served			
, , , , , , , , , , , , , , , , , , , ,				•				
Circle if Applicable:					Ciamatura (a)			
					Signature(s):	;		
MS/MSD Duplicate ID No.:					/ <i>J</i>	150	•	
-					4			



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Project Site Name: Project No.:	PWILP 739	Celve 8	ton		Sample Sample	ID No.:	ECM-TWI	3-02-50 bee Shickort
[] Domestic Well Data [] Monitoring Well Data ★ Other Well Type: [] QA Sample Type:	Tempose	in w	vell		Type of [X] Lo	No.: Sample: w Concent h Concentr	tration	
SAMPLING DATA:	general services and the second	adateja jaggapja,	· managara	Managari Ares es		APPROXAGE		
Date: 7 ~ 17 ~ 00	Color	рН	s.c.	Temp.	Turbidity	DO	ORP	Other
Tirne: 1435	Visual	Standard	mS/cm	° C	NTU	rng/i	mV	NA
Method: Hydropunci	Jery cloudy	6.71	51.1	20.7	979	7.3	251	-
PURGE DATÁ:	maa gaargeel cae	independential	entre established					
Date: N/A	Volume	pН	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Туре:				·				
Total Well Depth (TD):							 	
Static Water Level (WL):								
One Casing Volume(gal/L):			-					
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								
SAMPLE COLLECTION INFORMAT	TION:	tarijanje asati			tarii e elije		- 18	
Analysis		Preserv			Container Re	quirements		Collected
Vocs		He	' 4	49	MI VIELS	(XZ)		
	<u> </u>	<u> </u>						
<u> </u>								
								
	,							
,								
		<u> </u>						
OBSERVATIONS / NOTES:								અનું જેમની તમાર જ
Hydropuch Sempler se below water fable	fot de	pte of feet	50 fe B65.	et 865.	This is	Approxim	makely I	20 feet
- No odors, stains,								
				•	,			
Circle if Applicable:					Signature(s):			
MS/MSD Duplicate ID No.:						1 2	•	
						15		



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Project Site Name:	NWIR	P (حا	ve-to	`	Sample	ID No.:	ECM-TW14	1-01-49
Project No.:			·		_ '	Location:		
Domestic Well Data					Sample		Vince S	Hickorn
Monitoring Well Data					C.O.C.	No.: Sample:		
Other Well Type:	Temace	ma., (11			w Concen	tration	
[] QA Sample Type:	1000	tary (<u>~~1</u>			h Concenti		
				·				
SAMPLING DATA:	er, ele goden i jednjego	neigh Arthur	12.11年1月1日					and the second second
Date: 7-18-00	Color	pН	s.c.	Temp.	Turbidity	DO	ORP	Other
Time: 1245	Visual	Standard		°C	NTU	mg/l	mV	NA NA
Method: j+ydranch PURGE DATA:	Very cloudy	6.11	45.3	18.3	> 490	7.3	141	
			1		7		1	
Date: N/A	Volume	pН	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):				<u> </u>				
Total Purge Time (min):								
Total Vol. Purged (gal/L):								
SAMPLE COLLECTION INFORMAT	ION:	Section (Control of Control of Co		atteritarie man anna	Najarana salaha	Apple parameters of the second	. 2.001	
Analysis		Presers			Container Re			Collected
VOCS		H		400	VI VIELS	(x2)		2
				7.0.		<u> </u>		
								
· ·		·						
						····		
					*			
OBSERVATIONS / NOTES:								n nisyo 1 ki
11.) . 6 5 .) -	c.L.a.L	1 .11		1= N (^		() t	: .
Hydropunch Sampler.	3e 5 07	aspor	4 - آن -	17 het	B.65. T	his is s	5 feet 1	below
water table of 44 Fea	FBG.							
-No odors, stains a	relevi	ted f	ID r	cedings	observe	٢		
			,					
Circle if Applicable:					Signature(s):			
MS/MSD Duplicate ID No.:		ì			- · · ·	111		ł
-					los	100		



Project Site Name Project No.:	: <u>Nwil</u> 7	RP Cel	ue-to-1		Sample	ID No.:	ECM I	4-02-64 tree
71 Domostic Wo	II Data				Sample C.O.C.		VIACE S	4,ckora
Domestic We Manitoring W						Sample:		
[] Monitoring W Other Well Ty		425-	. 9. 11		• •	w Concer	ntration	
I QA Sample T		porry	wen			h Concent		
L Co. Copic (, po.				. u '''s'			
SAMPLING DATA:	g galagada da san sa gara i gala	وإفهاج أريفهوا	1000年			M ERICA MAT	LWS-SS-SMAP	
Date: 7-18-00	Color	pН	s.c.	Temp.	Turbidity	DO	ORP	Other
Time: 13.25	Visual	Standard	mS/cm	· °C	NTU	mg/l	mV	NA
Method: Hillrapance	h Very claud	y 6.69	48.4	18.7	>990	6.1	115	
PURGE DATA:	ittiikii ja ja tiririn milja ja ja ja ja ja ja ja ja ja ja ja ja j	TujiMigrad				Barana di Jawa		
Date: 7-18-00	Volume	pН	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: N/A								
Monitor Reading (ppm):		$\sqrt{}$						
Well Casing Diameter & M	(aterial							
.	note la						 	
Type:							 	
Total Well Depth (TD):							ļ	!
Static Water Level (WL):			 				-	
One Casing Volume(gal/L): ' •							
Start Purge (hrs):								
End Purge (hrs):								·
Total Purge Time (min):								
Total Vol. Purged (gal/L):	·							
SAMPLE COLLECTION	INFORMATION:	¹³ in the party	1.00 (1.00 May)	jarlarduster -	i the material and pro-	epinion in		
SAMPLE COLLECTION Analysis		Preser			Container Re			Collected
			vative			quirements		
Analysis		Preser	vative		Container Re	quirements		Collected
Analysis		Preser	vative		Container Re	quirements		Collected
Analysis		Preser	vative		Container Re	quirements		Collected
Analysis		Preser	vative		Container Re	quirements		Collected
Analysis		Preser	vative		Container Re	quirements		Collected
Analysis		Preser	vative		Container Re	quirements		Collected
Analysis		Preser	vative		Container Re	quirements		Collected
Analysis		Preser	vative		Container Re	quirements		Collected
Analysis		Preser	vative		Container Re	quirements		Collected
Analysis		Preser	vative		Container Re	quirements		Collected
Analysis		Preser	vative		Container Re	quirements		Collected
Analysis VOCs OBSERVATIONS / NOTE	S:	Preser H	vative		Container Re	equirements	X2)	Collected
Analysis VOCs	is: upler set et	Preser	vative		Container Re	equirements	X2)	Collected
OBSERVATIONS / NOTE	s: pler set et	Preser Ho	vative Δ	Feet B.	Container Re	equirements	X2)	Collected
OBSERVATIONS/NOTE Hydropuch Se water table of NO adors, S	s: pler set et	Preser Ho	vative Δ	Feet B.	Container Re	equirements	X2)	Collected
OBSERVATIONS/NOTE Hydropuch Se water table of	s: pler set et	Preser Ho	vative Δ	Feet B.	Container Re	equirements els (X2)	Collected
Analysis VOCS OBSERVATIONS/NOTE Hydropuch Se water table of NO adors, S Circle if Applicable:	s: pler set et	Preser Ho	vative Δ	Feet B.	Container Re	s is 20	X2)	Collected



		·					Page	OT
Project Site Name:	HWIRP	Celver	ton		Sample	ID No.:	Ecm-Twi	5-01-42
Project No.:	7398	\$7			Sample	Location:	ECAA	رحط
					Sample	d By:		
Domestic Well Data					C.O.C.			
[] Monitoring Well Data						Sample:		
浅 Other Well Type: [] QA Sample Type:	Tenpora	ry we	11			w Concen		
U €A Sample Type.					- П <u>ы</u> ді	h Concenti	ration	
SAMPLING DATA:	e jedinin kan aliganja	olegijā Josephinas -	ne se se se	(magning				Manager 12 annual rate of the
Date: 7-18-00	Color	рΗ	s.c.	Temp.	Turbidity	DO	ORP	Other
Time: 0905	Visual	Standard	mS/cm	°C	NTU	mg/l	твV	NA.
Method: Itydro punch	very dody	6.02	50.7	19.6	>990	6.1	112	7
	rilajajstani - mi		ar i di padagi i	in the second	and the second second second			
Date: N/A	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Туре:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								/
Total Purge Time (min):								
Total Vol. Purged (gal/L):								
SAMPLE COLLECTION INFORMAT	ION:	interpretation	an produ	Sales Constitution	arapron made	in the second second		
Analysis		Preserv	ative		Container Re	quirements		Collected
Vocs		it<	7	40	mi vids	(X2)		2
			-					
					· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
				···········				
								
OBSERVATIONS / NOTES:								年週からい。
- Hydropunch Sampler 5	ef at d	cotto!	42	Feet Bo	S. 74.	i dopre	vatel	15 Ret
- Hydropach Sapler s Below Water table	J 37	Feet	BGS.			/ 1	,,	, ,,,,,
- No odors, steins	or elevi	stell T.	LU PE	edings o	bservec			
Circle if Applicable:					Signature(s):			
MS/MSD Duplicate ID No.:					:1 /	AR		
_				i	المرا	NOC	>	



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Project Site Name: Project No.:	NWIRP 73°	1 Colu	erton			ID No.: Location:		5-02-57
			······································		Sample			Shickory
[] Domestic Well Data					C.O.C.			
Monitoring Well Data	-				Type of	Sample:		
⅓ Cother Well Type:	Tonp	orry	well			w Concen		
[] QA Sample Type:	`	<i>y</i>			[] Higi	h Concenti	ration	
SAMPLING DATA:	ta "Mayesa	uninggija propasio	i	enantamalantik et a e	To a Charles To a constant of the field	i kilonomin naponiji dagi egest		de anne le la comme de la comm
Date: 7-18-00	Color	рH	s.c.	Temp.	Turbidity	DO	ORP	Other
Time: 0955	Visual	Standard	mS/cm	°C	NTU	mg/l	mV	NA.
Method: Hydra Dund		6.25	38.5	19.1	7990	8.6	158	144
PURGE DATA:	elengenfeler om	upplikk-upplich				iderendekist		
Date: N/A	Volume	pH	s.c.	Temp. (C)	Turbidity	DO	Salinity	Other
Method:		F	0.0.	10.10.10)	Toronany		Johns	Culei
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):			·					
Start Purge (hrs):	-							
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								
SAMPLE COLLECTION INFORMAT	ION:	i integrações	in the state of th	Naji jihan asan	and the second of the second o	adding of the state of	1	
Analysis		Preserv	ative		Container Re			Collected
Vocs		H	4	401	1 Viels C	xa)		2045
								4
					·			

·								
		· · · · · · · · · · · · · · · · · · ·						·
				 				•
OBSERVATIONS / NOTES:			* 4					i gay at ali e
11	1. 1	1 1	, E	- 7 0 0	Dec 1			1
- Hydropunch Sempler 20 Rest below water	set at	depr	- eJ - J	t reet	168. 14	is is ef	3m 1xard	たり
20 feet before water	- table	of 3	7 feet	-BG5.			•	
	•							J
						,		Ĺ
Circle if Applicables					A:			
Circle if Applicable:		······································			Signature(s):	,		
MS/MSD Duplicate ID No.:			100	on Coc	$n \vee l$	AR		
ECM-T	w15-	03 - <u>L</u>	0		CL			l



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Project Site Name: Project No.:	NWIRP CALVERTON 7398				Sample ID No.: Sample Location: Sampled By:		ECM - TW 20 - 45 - 01 ECM - TW 20 ROBERT 6000	
Domestic Well Data Monitoring Well Data Other Well Type: QA Sample Type:	TEMPONAR	n WELL	BORING		C.O.C. I Type of Low	•		•
SAMPLING DATA:								
Date: 8-11-00	Color	pН	s.c.	Temp.	.Turbidity	DO	OZP	TBD
Time: 0430	Visual	Standard	mS/cm	<u>°C</u>	NTU	mg/l	(av)	ļ
Method: //ynRopuncu	BRN	6.46	179	22.0	2900	· 15.10	<u> </u>	
PURGE DATA:	7		1				7	TBD
Date: — NA -	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	TBD	180
Method:		 						
Monitor Reading (ppm):	 	>					 	
Well Casing Diameter & Material		 						
Type:		<u> </u>						
Total Well Depth (TD):	<u> </u>	<u> </u>	·	<u> </u>				
Static Water Level (WL):		<u> </u>						<u> </u>
One Casing Volume(gal/L):				<u> </u>			<u></u>	
Start Purge (hrs):	<u> </u>							<u> </u>
ćnd Purge (hrs):						· · · · · · · · · · · · · · · · · · ·		
Total Purge Time (min):		l					·	
Total Vol. Purged (gal/L):								`
SAMPLE COLLECTION INFORMA	ITION:							
Analysis		Preservative			Container R	Collected		
VUC		140		2 ×	40 ml	Vials		2
		 		 				
		4		 				
		1		l				i .
		 				<u></u>		
OBSERVATIONS I NOTES:								
OBSERVATIONS INOTES:								
HYDROPUNCH SAMPLER	DRIVEN FO	, 400	UPEN !	15 45 F				
1440RO PUNCH SAMPLER GCM - TW 20 NU ODORS OR PID. RE	DRIVEN FO	HSOVE	OPEN I	45 F	T. BELVU	SURFAC		
HYDROPUNCH SAMPLER GCM - TW 20 NO ODORS OR PID. Re	DRINEN FO	HSOVE	OPEN I	45 F	T. BELVU):	E Tou B	CONC
1440ROPUNCH SAMPLER GCM - TW 20	DRINEN FO	HSOVE	OPEN I	45 F	T. BELVU):		CONC



Page_/ of /

Monito		NWIRP 7388 TEMPORA				C.O.C. I Type of I Low	ID No.: Location: d By: No.: Sample: Concentra concentra		0-60-01 20 7002
SAMPLING DA	TAX								eron april de la com
Date: 8-11-0		Color	рН	s.c.	Temp.	Turbidity	DO	TBD	TBD
Time: 1020	<u> </u>	Visual	Standard	mS/cm	°C	NTU	mg/I	ORP	
Method: /47 0 A.	PUNCH	BRW	6.44	184	21,1	1348	15.5	-43	
PURGE DATA:		i di proposito perception							
Date: - N/	7_	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD
Method:									,
Monitor Reading	(ppm):								
Well Casing Dia	meter & Material								
Type:									
Total Well Depti	h (TD):				,				
Static Water Le									
One Casing Vol									
Start Purge (hrs									·
End Purge (hrs)									
									/
Total Purge Tim Total Vol. Purge									
SAMPLE COL	ECTION INFORMAT	L TION:							
	Analysis	Control of the Contro	Presen			Container Re			Collected
VOC			140	1	2 × 4	oml vi	`als		2
								·	
									· · · · · · · · · · · · · · · · · · ·
transferrigit committee along the confe	VSV/NOTES:								
transferrigit committee along the confe									
HY DROPU	INCH SAMPLE								
transferrigit committee along the confe	INCH SAMPLE								
HYDROPU ECM - T	WZO.	EN AMVER	צ פו	ريم م	AT 60				
HYDROPU ECM - T	INCH SAMPLE	EN AMVER	צ פו	ريم م	AT 60				
HYDROPU ECM - T	WZO.	EN AMVER	צ פו	ريم م	AT 60				
HTAROPU ECM -T NO 000	WZO.	READINGS	ABOVE	open PACH	15 60 (GROUN)		ow Sur;		
HTAROPU ECM -T NO 000	NS ON PED. 1	READINGS	ABOVE	open PACH	15 60 (GROUN)	FT BEC	ow Surf	ence In	BORINSL
HT DROPO ECM - T NO 000 Circle II Applic	NICH SAMPLE IN 20. RS ON PED. 1	READINGS	ABOVE	open PACH	15 60 (GROUN)	FT BEC	ow Surf		BORINSL



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Project Site Name: Project No.: [] Domestic Well Data [] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	NWIRD 7398 TEMPORAR				Sample Sample C.O.C. I Type of K Low	d By:		20
SAMPLING DATA:								
Date: 8-11-00	Color	рН	s.c.	Temp.	Turbidity	DO	TBD	TBD
Time: //2.2	Visual	Standard	mS/cm	° C	NTU	mg/l	mt	
Method: #10R8PUNCH	BRN	6.80	174	21.2	3240	15.40	-46	, ordere sociale distribution de la constant
PURGE DATA:				#######				
Date: - NA	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type:						·		
Total Well Depth (TD):								
Static Water Level (WL):			·					
One Casing Volume(gal/L):	1							
Start Purge (hrs):								
End Purge (hrs):		t						
Total Purge Time (min):								
Total Vol. Purged (gal/L):		 	<u> </u>				<u> </u>	
SAMPLE COLLECTION INFORMA	TION:							THE THE
Analysis		Preser			Container Re			Collected
VX		Hel	1	2 * 40	and Vial	<u>'</u>		2
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OBSERVATIONS / NOTES:								
HYDROPUNCH SAMPLER	MINEN	FU E	OPEN	15 80 1	FF BELOW	SURFAC	5 IN	
BORING ECM - TWZE				•				
borno Beneral a	•							
NU ODORS OR P.T.O.	0.540	. 11	·	Ac 4 (0				
700 Doores Die 1.1.0.	JC CHUID	() /***	1000 /5	TEFE OSCOL				
			• .				·	
Circle of Applicable:					Signature(s):		
MS/MSD Duplicate ID No.:			•		100		8/11/00	•
					a	6-1	0/11/00	
120: 16 Se Determined					^			



Page_/_ of __

Project Site Name: Project No.: [] Domestic Well Data [] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	NWJRP 7398 TEMPORA			1136	C.O.C. I Type of Y Low	a By:		10-100-01 20 6001
SAMPLING DATA:								
Date: 8-11-00	Color	pН	s.c.	Temp.	Turbidity	DO	TBD	TBD
Time: /235	Visual	Standard	mS/cm	°C	NTU	mg/l	ORCET)	
Method: HY OND PANCH	Ban	6-41	180	20.2	3200	14.20	-40	
PURGE DATA:								
Date: — NA —	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type:			/					
Total Well Depth (TD):				//				·
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):			·					
End Purge (hrs):								
Total Purge Time (min):		 						
Total Vol. Purged (gal/L):	<u> </u>							
SAMPLE COLLECTION INFORMA	L TION:							
Analysis		Preser			Container Re			Collected
Voc		140	/	2 × 4	10 ml v			2
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OBSERVATIONS/NOTES:								
HYDROPUNCH SAME		IVÊN TO	9 8 6	OPEN AT	- 100 F	- Récou	SURFI	Иċ
IN BORING ECM	- 1620		•					
10 00-2 20 20-2	DEAL	. 10	۔ مفہر	her para in			-	
po odors or RIA.	ICCMUING	5 (17)00	re prici	ת האינטע אט []				
Circle if Applicable:		there in	1:4491 04 1#		Signature(s)	•		
MS/MSD Duplicate ID No.:					Pos	tul	8/11/60	



TBD: To Be Determined

Project Site Project No.:		NWIRP 7398	CALVE	ひし				ELM-962 ECM-74	20
∐ Monito ∑ Other	stic Well Data pring Well Data Well Type:	TEMPORAL	n we	u Bol	2ML	C.O.C. I Type of A Low	•		5009
[] QA Sa	mple Type:					יפייי נו	, Conocina	ation	
SAMPLING DAT	A:								
Date: 8-/1-0		Color	pН	s.c.	Temp.	Turbidity	DO	TBD	TBD
Time: /340		Visual	Standard	mS/cm	°C	NTU	mg/l		
Method: //gara	PHUCH	-			NA _				
PURGE DATA:					ekstykingszijári				
Date: NA		Volume	pН	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD
Method:		<u> </u>						ļ	
Monitor Reading	(ppm):								
Well Casing Diar	neter & Material			······································					
Туре:									
Total Well Depth	(TD):								
Static Water Lev									
One Casing Volu									
Start Purge (hrs)			·					`	
End Purge (hrs):		<u> </u>				· · · · · · · · · · · · · · · · · · ·			
Total Purge Time		<u> </u>							
Total Vol. Purged	i (gaVL):		enanialistas			sousiona antia compositio	vastiantsetui viitskaidiskiidiski		
	ECTION INFORMA	HUN:	Preserv			Container Re			Collected
	Analysis		HCI		2.41	we Via			2
Voc			77.07		2 7 70	DO()/4			
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HY ORO PU		TA ARIVE	EN TO	e opz	N AT	120 FT	BELOW S	SURFACE	Tw.
HYDRO PU BORING	NCH SAMPLE	TA ARIVE	EN TO	e opz	N AT	120 FT	BELOW S	SURFACE	Jw.
HYDROPU BORNC MEASUR	NCH SAMPLE ECM - TWZ	TA PRIVE	en ru Insuef.	T OPE	- WATE	120 FT A VOLUM	BELOW S	SURFACE	Tw.
HYDROPU BORING MEASURI NO ODOR	NCH SAMPLE ECM - TWZ EMENB	READIN	EN TO INSWEF.	T OPE ICIENT BOVE É	N AT , - WATE PACHGAI	120 FT A VOLU M	BELOW S NE FUR	SURFACE	Tw
HYDROPU BORING MEASURI NO ODOR	NCH SAMPLE ECM - TWI EMENTS IS OR PID.	READIN	EN TO INSWEF.	T OPE ICIENT BOVE É	N AT , - WATE PACHGAI	N VOLU A UND Signature(s)	BELOW S NE FUR S	Sunface FiELD	
HYDROPU BORNIC MEASURI NO OQOR Circle II Applica	NCH SAMPLE ECM - TWZ EMENTS S OR PID.	READIN	EN TO INSWEF.	T OPE ICIENT BOVE É	N AT , - WATE PACHGAI	N VOLU A UND Signature(s)	BELOW S NE FUR S	SURFACE	



Page _ of

[] Monit ∰ Other	e Name: .: estic Well Data oring Well Data Well Type: ample Type:	MWIRP 73 Tenpo	Calver 98 orany 1	_		Sample Sample C.O.C. I Type of X Low [] High	Location: d By: No.: Sample: Concentra Concentr	ation	ShuKorA
The second second second second	JA:	7					DO	TBD	TBD
Date: 8-1 Time: 111	4-00	Color Visual	pH Standard	S.C. mS/cm	Temp. ℃	Turbidity NTU	mg/I	185	1
	ropunch	dery closely		facint	Volume	حرصعومون	for fiel		
PURGE DATA:									
Date:	NA	Volume	pН	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD
Method:								<u> </u>	
Monitor Reading	g (ppm): <i>D</i>								
Well Casing Dia	ameter & Material								
Type:									
Total Well Depti	h (TD):							ļ	
Static Water Le	vei (WL):						<u> </u>		
One Casing Vol	lume(gal/L):								
Start Purge (hrs	5):								
End Purgè (hrs)):		<u> </u>						
Total Purge Tim									
Total Vol. Purge	ed (gal/L): ECTION INFORMA	- A siferial continue (success)	okduskaiseiseaduisel		sinsiti tansiti e esali		na isalahan dalah dalah dalah		
SAMPLE COL	Analysis	HUNS TO THE	Presen			Container Re			Collected
VCC			H		40	MI Vials	(xx)		2
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ORCEDWATION	IS / NOTES:								
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- Hydrof	sunch semp	le Set	י דני	Septh	or 4	5 reet	p.0.3	>_	
- 11-	dors stan	,	1-1	ا لدے	ID rea	dinas of	Served	<u> </u>	
NO 02	313, 3121	, 0, 6	12021		•	<i>J</i>	,		
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Circle if Applic	able;****= *******	il a creative de				Signature(s)	•		
MS/MSD	Duplicate ID No.:	and the state of t		12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	A CONTRACTOR OF THE		111	0	
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TBD: To Be Dete	lermined								



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Project Site Name: Project No.:	NWIR	ادے 1 398ء	verte.	\	Sample	Location:	ECM-TWO	fred !
[] Domestic Well Dat [] Monitoring Well Da	ıta	0000	محدا ،	()				Shekura
[] QA Sample Type:		bosed	<u>,</u>	<u></u>		h Concent		
paradinatemanination des	na. Baran na 40 fu faraga ann an taoint an taoin	in	agen escalas districtivadas distribus			edasia diberina dinamentiko	d staulin kurtudelä skaldandala	
SAMPLING DATA:				T	, , , , , , , , , , , , , , , , , , , 		Paranting	JBB
Date: 8-14-05 Time: 12-25	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO	ORP	SAL
Method: Hydroounch	Very cloudy	9. i3	253	16.84	1345	5.13	-38.4	0.0
PURGE DATA:					Herita (SALE)			
Date: NA	Volume	рΗ	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):							 	
Total Purge Time (min): Total Vol. Purged (gal/L):								
SAMPLE COLLECTION INFOR	L MOLTAN		editadiikaa					
Analysis	A A A A A A A A A A A A A A A A A A A	Preserv		och en danstrumensstrumen	Container Ro		inar Helan (translation selection and	Collected
VOCS		H	4	4	omi Ha		፯.)	۷
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OBSERVATIONS / NOTES:	ter bermanner in er feneren gefeber eleber eine befange bei en bei ber	Selential and the selection and	1 /	νF	/- C	+ 0/		
- Hydropunch S - No odors Si	plan	جوات ع) ن	T Gep	7~01 1	60 Pe	υ ψ. σ	3, /	
- No odors, Si	teins, or	elev	sted	PLD	redi	rgs ob	served	•
				Officered School projects of the control of the con-		·		
Circle if Applicable:					Signature(s)):		
MS/MSD Duplicate ID N	0.:	,				JAK	2	
TBD: To Be Determined						., ., .		



TBD: To Be Determined

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Project Site Name: Project No.:	NWIR 7:	P (elvert	on	Sample Sample	ID No.: Location:	ECM-TW ECM	21-80-01 Aree_ Shickera
[] Domestic Well Data [] Monitoring Well Data [] Other Well Type: [] QA Sample Type:	Ten	porery	Wel	(C.O.C. Type of	o By: No.: Sample: Concentra Concentr	ation	<u> </u>
SAMPLING DATA:								
Date: 8-14-00	Color	pН	s.c.	Temp.	Turbidity	DO	100	TBB
Time: 1440	Visual	Standard	mS/cm	°C	NTU	mg/l	ORP	SAL
Method: Hydro pusch	very cloudy	7.81	145	16.60	1106	4.16	-70.2	0.0
PURGE DATA:								
Date: NA	Volume	pН	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD
Method:						······································		
Monitor Reading (ppm):				į.				
Well Casing Diameter & Material								
Туре:								
Total Well Depth (TD):								
Static Water Level (WL):						· · · · · · · · · · · · · · · · · · ·		
				<u> </u>				
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):		<u> </u>			· · · · · · · · · · · · · · · · · · ·	<u></u>		
Total Purge Time (min):								
Total Vol. Purged (gal/L):		<u> </u>						omionalisandishimidakannid Ed:
SAMPLE COLLECTION INFORMAT	ION:							
Analysis		Preserv		11-	Container Re		-} -	Collected
VOCS		HC	-/	70	MI VIST	CX2		
						 		
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OBSERVATIONS / NOTES:								
- Hydropunch Semp	م سرا	+ 2+	1-0	U F	2n f	+ BG		1
- No dors, stains	50	لمدروا	ed 1	DIO re	edings	observ	red	
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MS/MSD Duplicate ID No.:	contracted the second second second							.]
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Project Site Name:	HWIR	PC	lverte	ea		ID No.:	ECM-TWG	21-100-01
Project No.:		<u> 2398</u>					ECM A	
					Sample	-	Vince C	ShickerA
Domestic Well Data					C.O.C.			
Monitoring Well Data				- 44		Sample:	-4:	· •
Other Well Type:	120	aparz,	cy k	2011		Concentra		
[] QA Sample Type:					. U migi	n Concentr	ation	[
SAMPLING DATA:								
Date: 8 - 14 - 00	Color	рH	s.c.	Temp.	Turbidity	DO	.780	-100-
Time: 1545	Visual	Standard	mS/cm	°C	NTU	mg/l	ORP	SAL
Method: Hydropunch	Cloudy	7.13	306	16.18	1285	1.97	- 98.3	0.0
PURGE DATA:								
Date: NA	Volume	рН	s.c.	Temp. (C)	Turbidity	DO	TBD	TBD
	70/0///	P++		10111111111111	,,			
Method:								
Monitor Reading (ppm):			 -	<u> </u>				
Well Casing Diameter & Material				ļ				
Type:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):						***		
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End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):	- n - A min to Purad Large Addition	iotores orași ai altele 199	de balakisi Abrika bis	Chiange Harrist State Commence	n kandidadisetiisinsotaan (.).	anglete skillskatilitet	her englands refinition in the Comment	
SAMPLE COLLECTION INFORMAT	IIUN							Collected
Analysis VDC 5		Presen		- Un	Container Re		\	Z.
VVCS		175	-1		MI FIEL	<u> </u>	<u></u>	
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OBSERVATIONS // NOTES:								
- Hydropench Sem - No odors, ste	pler s	at ot	100	, Feet	B.G.S.	•		
		•	1 .	PTA	-1-	e alen-	ل مدرد	
- No odors ste	ins o	rele	uzted	1 40	rescing	2 0016	ive_	
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	Managara and Managara and Assault	to a manufacture of the control of t	el ancien per les regions en maintains				ذه مرسم بها السبية السبية	
Circle II Applicable;			alerbija li k		Signature(s)) :		
MS/MSD Duplicate ID No.:			•	•		1	10	
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TBD: To Be Determined				J				



TBD: To Be Determined

						·	Page	01
Project Site Name: Project No.: [] Domestic Well Data [] Monitoring Well Data **Cother Well Type: [] QA Sample Type:		orary	We	11	Sample Sample C.O.C. Type of Low		Vince ation	221-136-01 Arez Shickora
SAMPLING DATA:				economica production and a second				
Date: 8-15-00	Color	pН	s.c.	Temp.	Turbidity	DO	TED C	780 CA1
Time: 0925	Visual	Standard	mS/cm	°C	NTU	mg/l	ORP	SAL
Method: Hydropunch	veyelway	8.79	259	16.40	1644	i.93		0.0
PURGE DATÁ:					I			
Date: PA	Volume	pН	S.C.	Temp. (C)	Turbidity	DO	TBD	TBD
Method:				·				
Monitor Reading (ppm): O								
Well Casing Diameter & Material								
Туре:								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								-
Total Burgo Time (min):					i t			
Total Purge Time (min):								
Total Vol. Purged (gal/L):	- Stanisani sa Fras	acultaria kandikiriri	Seerne viilikisidania	enistrak seriakak asatukatia	ilan santa antida kana sa	antinus elektronis dal 1901		
Total Vol. Purged (gaVL): SAMPLE COLLECTION INFORMA	TION:							
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA Analysis	TION:	Preserv	ative		Container Re	quirements		Collected
Total Vol. Purged (gaVL): SAMPLE COLLECTION INFORMA	· FION:		ative					
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA Analysis	TION:	Preserv	ative		Container Re	quirements		Collected
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA Analysis	TION:	Preserv	ative		Container Re	quirements		Collected
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA Analysis	IJON:	Preserv	ative		Container Re	quirements		Collected
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA Analysis	TION:	Preserv	ative		Container Re	quirements		Collected
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Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA Analysis	HON:	Preserv	ative		Container Re	quirements		Collected
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA Analysis	I/ON:	Preserv	ative		Container Re	quirements		Collected
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA Analysis	TION:	Preserv	ative		Container Re	quirements		Collected
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA Analysis	HON:	Preserv	ative		Container Re	quirements		Collected
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA Analysis VDCs	MON:	Preserv	ative		Container Re	quirements		Collected
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA: Analysis VOCs OBSERVATIONS / NOTES:		Preserv	vative	40.	Container Re	equirements		Collected
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA: Analysis VDCs OBSERVATIONS/ NOTES:	pler se	Preserve HC	dept	40. hot 1	Container Re	H B.G.	5. Pr s	Collected 2
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA: Analysis VDCs OBSERVATIONS / NOTES:	apler se	Preserve He	dept	hof ,	Container Re MI Viels 130 fee sy, made	t B.C.	S. Fars	Collected 2
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMA Analysis VOCS OBSERVATIONS/INOTES: Hydropunch San (unsuccesiful sample a	apler se	Preserve He	dept	hof ,	Container Re MI Viels 130 fee sy, made	+ B.G.	S. Fars	Collected 2
Total Vol. Purged (gal/L): SAMPLE COLLECTION INFORMAT Analysis VDCs OBSERVATIONS/ NOTES: - Hydro punch Sample a	apler se	Preserve He	dept	hof ,	Container Re MI Viels 130 fee Ty, made	+ B.G.	S. Fars	Collected 2

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CHAIN OF CUSTODY RECORD

PROJECT N		מפי			ENAME:			1/2	7	7	7	7	//
SAMPLERS	(SIGNA	TURE):	Ø		VWIRP Calverton	NO. OF CON- TAINERS		10/		//	//	//	REMARKS
STATION NO.	DATE	TIME	СОМР	GRAB	STATION LOCATION		\rangle \(\frac{1}{2} \)	<u>Z</u>		_	<u> </u>	_	
	elzilor	101		X	TR-062600	\mathcal{Z}	2				·		Trip Flank
	2/26/19			X	TR-062600 ECM-TWO7- 30,20) 2	Z						,
	$a_{i,k}$	13 28			ECM-TW07-3-05	1	2						·
	Jan !			1	ECM - TWO8-1-05	ス	2						
	127/1			<i>f</i>	ECM-+W08-2-20	٦	2					·	
	13 H			1	ECM-TW09-1-05	2	2						
	151/6	1510		X	ECM-TW09-2-20	2	Z						
		7 1 4											
					TEMPERALD BLANK								
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RELINQUI	SHED BY			<u> </u>	DATE / TIME: RECEIVED BY(SIGNATURE):	RELI	NQUISI	IED BY	(SIGNA	ATURE)) :	DAT	re / TIME: RECEIVED BY(SIGNATURE):
RELINQUI				(<i>I</i>	OATE / TIME: RECEIVED BY (SIGNATURE):	RELI	NQUISI	IED BY	(SIGN/	ATURE)):	DA	TE / TIME: RECEIVED BY(SIGNATURE):
	(P117777	, 10,000	A T1100 P.		DATE / TIME: RECEIVED FOR LABORATORY	/RV 5	TE / T	ag. Is	PEMAPI	Y & •			Mi and his coursely do
RELINQUI	SHED #/	(SIGN	A IUKŁ):	-	DATE / TIME: RECEIVED FOR LABORATORY (SIGNATURE):	0/	ATE / TI	ME:	ne mirati		ionej beve		elivered by crovier to

CHAIN OF CUSTODY RECORD

PROJECT N		?7c	>		ENAME: VWIRE	Calverton			/	/	7	7	7	//	/	
SAMPLERS	(SIGNA	TURE):	DA	Mu	Ralen.		NO. OF CON- TAINER	s /			//	//	//		REMARK	
STATION NO.	DATE	TIME	COMP	GRAB		STATION LOCATION				\angle	\angle		_			
	722.0	7940		X	ECM-	TW10-1-05	2	2					·			
	. 3:	ie17		X		GREET		\mathcal{Z}				·		7	ir Flank	
	1/38/4	1348		X		TWII-1-05	2	Z								
	124,	11175		X		TW11-2-20	l 2	Z								
	4/0	1030		χ		-Twic-2-20		2								·
		102														
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RELINQUI		. •	ATURE): Raba		ATE/TIME:	RECEIVED BY(SIGNATURE)	: RE	LINQUIS	HED BY	r (SIGN/	ATURE)):	DA	re/TIME:	RECEIVED BY(SIG	NATURE):
RELINQUI						RECEIVED BY (SIGNATURE): RE	LINQUIS	HED BY	(SIGN/	ATURE)):	DA	TE/TIME:	RECEIVED BY(SIG	NATURE):
RELINQUI	SHED BY	(SIGN	ATURE):		DATE / TIME:	RECEIVED FOR LABORATO (SIGNATURE):	RY BY	DATE / TI	ME:	REMAR					ed by row	

PROJECT N	10.: 53-	0	30a	SIT	ENAME: IWIRP Calue	rton			/	7	7	7	7	//	7			
SAMPLER	S (SIGNA	TURE):	ada	af ligar	- tensa (keni	ce (i	NO. OF CON- TAINERS	/	S			//				REMARK	5	
STATION NO.	DATE		СОМР	GRAB	STATION LOCATION	l		30	<u>Z</u>	\angle	_		_					
	1/1/00	1100		1	5A-TW-112-2:	2-01	2_	2										
ł	1%	1150	· .	1	SA. TW-112-35	1-01	2	2							· · · · · · · · · · · · · · · · · · ·			
	1900	1250		~	5A TW-112-55	5-01	2	2									·	
	19/0	1345	i	"	SA-TW-112-75	5-01	2	2								·		
	12/00	1440	•	~	SA-TW-112-95	5.01	2	2										. 94
	3/2	1010		1	(Tr.p Blank) TB.	07/000	2	2										51 % (1)
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PROJECT N	IO.:			SIT	E NAME:				7	7	7	7	7	7 7	·	
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	7/3/00	1245	·	1	1	TW14-01-49	2	2								
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RELINQUI	RELINQUISHED BY (SIGNATURE): DATE / TIME: RECEIVED FOR LABORATORY E (SIGNATURE):			BY DATE/TIME: REMARKS: Sample shipped by EcoTest Laboratory Courier					-							

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	94/00	0430				000 (RHISAGE)	2	2							
	911/00	0430		~	ECM-T	TW20-45-01	2	2							
<u> </u>	8/11/0	1020		W.	GCM-7	w 20 - 60 - 01	2	2							
	8/11/00	1122		1	ECM-	Tw20-80-01	2	2		ļ					
	8/11/00	1235		1	Ecm-7	Tw 20-100-01	2	2							
	8/11/00	1340		1	Ecm. i	w 20-120-01	2	2		<u> </u>					
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RELINQUISHED BY (SIGNATURE): DATE / TIME: RECEIVED FOR LABORATORY BY (SIGNATURE):						y D/	ATE / TII	ME:					31 610	PORTEORY CONTLICE BY	

PROJECT N	iO.:			SIT	E NAME:					7	7	7	7	7	7	7		
7	798	>		l A	WIRP	Calve	rton			1					/ /			
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	8/19/00	1115		X	ECM	-Tw2	4-45-01	2	2									·
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	126	1440	l	X			1-80-01	2	2									
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RELINQUI	RELINQUISHED BY (SIGNATURE): DATE / TIME: RECEIVED BY (SIGNATURE):			Y (SIGNATURE):	RELI	IQUISH	ED 8	(SIGNA	TURE)	:	DAT	E/TIME:	RECEIVE	D BY(SIGNA	TURE):			
BEI 1110111	ELINOUISHED BY (SIGNATURE): DATE / TIME: RECEIVED FOR LABORATORY BY				TF / TH	ME. I	REMARI	KS: -			h. 1 :							
KELINGUI	ELINQUISHED BY (SIGNATURE): DATE / TIME: RECEIVED FOR LABORATORY B (SIGNATURE):				E):	VBY DATE/TIME: REMARKS: Shipped by Laboratory Courser						USIES						

therefore, gw moves 1.94x as fast as 1,1,1-TCA

ENT	AUY		JOB NUMBER								
NECT	AVT		N 3853								
			DRAWING NUMBER								
ED ON			DRAWING NOMBER								
JPO		CHECKED BY	APPROVED BY	DATE 8/8/00							
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	<u>n=.3</u>										
	1 hydra	which gradient	8015 2 site								
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the	gw +low u	elocity (Vgm =	K1/K) 18:								
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he !	1,1-TCA V	nig-aution dist	ence over the san	m time span							
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APPENDIX B ANALYTICAL RESULTS



LAB NO:203037.07

08/18/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

PO#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #3853 COLLECTED BY: Client DATE COL'D:07/10/

DATE COL'D:07/10/00 RECEIVED:07/11/00

SAMPLE: Water sample, ECM-MW01-0007, 1750

ANALYTICAL PARAME	ETERS		ANALYTICAL PARAM	ETERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	·<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L	<1
1.1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane	ug/L	<1
Chloroform	ug/L	<1	Dichlordifluomethane	ug/L	<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene	ug/L	<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride		<1		-	
Bromodichloromethane		<1			
1,2 Dichloropropane	ug/L	<1	•		
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methy1-2-Pentanone		<10			
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1			
1122Tetrachloroethan		<1			
Chlorobenzene	ug/L	<1			

cc:

REMARKS:



LAB NO:203058.07

08/18/00

Tetra Tech Nus, Inc. Foster Plaza VII, 661 Anderson Dr. Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #3853-0300

DATE COL'D:07/11/00 RECEIVED:07/12/00 COLLECTED BY: Client

SAMPLE: Water sample, ECM-MW02-0007, 1503

ANALYTICAL PARAMI	ETERS		ANALYTICAL PARAM	ETERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther		<1
1,1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane	-	<1
Chloroform	ug/L	<1	Dichlordifluomethane		<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene		<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene		<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride		<1			
Bromodichloromethane		<1			
1,2 Dichloropropane		<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone		<10			
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1			
1122Tetrachloroethan		<1			
Chlorobenzene	ug/L	<1			

cc:

17790

REMARKS:

DIRECTOR

NYSDOH ID# 10320

ECO EST LABORATORIES, INC.

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777• FAX (631) 422-5770

LAB NO:202830.03

07/05/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #CT270

COLLECTED BY: Client

DATE COL'D:06/26/00 RECEIVED:06/28/00

SAMPLE: Water sample, ECM-TW07-2-05, 1328

ANALYTICAL PARAME	ETERS		ANALYTICAL PARAMI	ETERS	
Chioromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L	<1
1,1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichiorofluomethane		<1
Chloroform	ug/L	<1	Dichlordifluomethane		<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene		<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride		<1			
Bromodichloromethane		<1			
1,2 Dichloropropane	ug/L	<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methy1-2-Pentanone		<10			
2-Hexanone	ug/L	<10		•	
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1 .			
1122Tetrachloroethan		<1			
Chlorobenzene	ug/L	<1	•	· ·	

cc:

REMARKS:

DIRECTOR_____



LAB NO:202830.02

07/05/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

PO#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #CT270

COLLECTED BY: Client DATE COL'D:06/26/00 RECEIVED:06/28/00

SAMPLE: Water sample, ECM-TW07-1-20, 1230

ANALYTICAL PARAMI	ETERS		ANALYTICAL PARAMI	STERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L	<1
1,1 Dichioroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichiorofluomethane	ug/L	<1
Chloroform	ug/L	<1	Dichlordifluomethane	ug/L	<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene	ug/L	<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride		<1		•	
Bromodichioromethane	ug/L	<1			
1,2 Dichloropropane	ug/L	<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1	·	•	
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone	ug/L	<10			
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1		·	
Toluene	ug/L	<1			
1122Tetrachloroethan	ug/L	<1			
Chlorobenzene	ug/L	<1			

cc:

REMARKS:

DIRECTOR

NYSDOH ID# 10320



LAB NO:202830.04

07/05/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #CT270

COLLECTED BY: Client

DATE COL'D:06/27/00 RECEIVED:06/28/00

SAMPLE: Water sample, ECM-TW08-1-05, 0854

ANALYTICAL PARAMI	ETERS		ANALYTICAL PARAME	TERS	
Chloromethane	ug/L ·	<1 %	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
·1,1 Dichloroethene	ug/L	<1	ter.ButyiMethyiEther	ug/L	<1
1.1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane	ug/L	<1
Chioroform	ug/L	<1	Dichlordifluomethane	ug/L	<1
1.2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene	ug/L	<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride	ug/L	<1			
Bromodichloromethane	ug/L	<1			
1,2 Dichloropropane	ug/L	<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1		. •	
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone		<10			
2-Hexanone	ug/L	<10			
Tetrachioroethene	ug/L	<1			
Toluene	ug/L	<1			
1122Tetrachioroethan		<1			
Chlorobenzene	ug/L	<1		•	

cc:

REMARKS:



LAB NO:202830.05

07/05/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

PO#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #CT270

COLLECTED BY: Client

DATE COL'D:06/27/00 RECEIVED:06/28/00

SAMPLE: Water sample, ECM-TW08-2-20, 0955

ANALYTICAL PARAM	ETERS		ANALYTICAL PARAMET	ΓERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L <1	,
Vinyl Chloride	ug/L	<1	Styrene	ug/L <1	
Chloroethane	ug/L	<1	o Xylene	ug/L <1	
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L <2	
Acetone	ug/L	<10		ug/L <3	
Carbon disulfide	ug/L	<1		ug/L <1	
1,1 Dichloroethene	ug/L	<1		ug/L <1	
1,1 Dichioroethane	ug/L	<1		ug/L <1	
1,2 Dichloroethene	ug/L	<1		ug/L <1	
Chloroform	ug/L	<1		ug/L <1	
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene		
2-Butanone	ug/L	<10	t-1,3Dichloropropene		
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L <1	
Carbon Tetrachloride	ug/L	<1			
Bromodichloromethane		<1			
1,2 Dichloropropane	ug/L	<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone		<10			
2-Hexanone	ug/L	<10	•		
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1			
1122Tetrachloroethan	_	<1			
Chlorobenzene	ug/L	<1			

cc:

REMARKS:

DIRECTOR β -6



LAB NO:202830.06

07/05/00

Tetra Tech Nus, Inc. Foster Piaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #CT270

COLLECTED BY: Client DATE COL'D:06/27/00 RECEIVED:06/28/00

SAMPLE: Water sample, ECM-TW09-1-05, 1425

ANALYTICAL PARAMI	ETERS		ANALYTICAL PARAM	ETERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L	<1
1.1 Dichloroethane	ug/L	<1 .	Freon 113	ug/L	<1
1.2 Dichloroethene	ug/L	<1	Trichlorofluomethane	ug/L	<1
Chioroform	ug/L	<1	Dichlordifluomethane	ug/L	<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene	ug/L	<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride	ug/L	<1			
Bromodichioromethane	ug/L	<1			
1,2 Dichioropropane	ug/L	<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone	ug/L	<10			
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1			
1122Tetrachioroethan	ug/L	<1			
Chlorobenzene	ug/L	<1			

cc:

REMARKS:



LAB NO:202830.07

07/05/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr. Pittsburgh, PA 15220-2745

Pittsburgh, PA

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #CT270

COLLECTED BY: Client

DATE COL'D:06/27/00 RECEIVED:06/28/00

SAMPLE: Water sample, ECM-TW09-2-20, 1510

ANALYTICAL PARAM	ETERS		ANALYTICAL PARAME	TERS
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L <1
Vinyl Chloride	ug/L	<1	Styrene	ug/L <1
Chloroethane	ug/L	<1	o Xylene	ug/L <1
Methylene Chioride	ug/L	<1	m + p Xylene	ug/L <2
Acetone	ug/L	<10	Xylene	ug/L <3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L <1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L <1
1.1 Dichloroethane	ug/L	<1	Freon 113	ug/L <1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane	ug/L <1
Chloroform	ug/L	<1	Dichlordifluomethane	ug/L <1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene	ug/L <1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L <1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L <1
Carbon Tetrachloride	ug/L	<1		
Bromodichloromethane	ug/L	<1		
1,2 Dichioropropane	ug/L	<1		
112 Trichloroethane	ug/L	<1		•
Benzene	ug/L	<1		
Bromoform	ug/L	<1		
4-Methyl-2-Pentanone	ug/L	<10		
2-Hexanone	ug/L	<10		
Tetrachloroethene	ug/L	<1		
Toluene	ug/L	<1		
1122Tetrachloroethan	ug/L	<1		
Chlorobenzene	ug/L	<1		

cc:

REMARKS:





LAB NO:202880.01

07/06/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

PO#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #CT0270

COLLECTED BY: Client

DATE COL'D:06/28/00 RECEIVED:06/29/00

SAMPLE: Water sample, ECM-TW10-1-05, 0940

ANALYTICAL PARAME	ETERS		ANALYTICAL PARAME	TERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L	<1
1,1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane		<1
Chloroform	ug/L	<1	Dichlordifluomethane		<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene		<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachioride	ug/L	<1			
Bromodichloromethane	ug/L	<1			
1,2 Dichloropropane	ug/L	<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone		<10			
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1			
1122Tetrachloroethan	ug/L	<1			
Chlorobenzene	ug/L	<1			

cc:

REMARKS:



LAB NO:202880.05

07/06/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #CT0270

COLLECTED BY: Client

DATE COL'D:06/29/00 RECEIVED:06/29/00

SAMPLE: Water sample, ECM-TW10-2-20, 1030

ANALYTICAL PARAMI	ETERS		ANALYTICAL PARAMETERS	
Chloromethane	ug/L	<1	Ethyl Benzene ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene ug/L	<1
Chloroethane	ug/L	<1	o Xylene ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene ug/L	<2
Acetone	ug/L	<10	Xylene ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther ug/L	<1
1.1 Dichloroethane	ug/L	<1	Freon 113ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane ug/L	<1
Chloroform	ug/L	<1	Dichlordifluomethane ug/L	<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene ug/L	<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene ug/L	<1
Carbon Tetrachloride	ug/L	<1		
Bromodichloromethane	ug/L	<1		
1,2 Dichloropropane	ug/L	<1		
112 Trichloroethane	ug/L	< 1		
Benzene	ug/L	<1		
Bromoform	ug/L	<1		
4-Methyl-2-Pentanone	ug/L	<10		
2-Hexanone	ug/L	<10		
Tetrachioroethene	ug/L	<1		
Toluene	ug/L	<1		
1122Tetrachioroethan	ug/L	<1		
Chlorobenzene	ug/L	<1		
Curoropenzene	πR\ Γ	^1		

cc:

REMARKS:

DIRECTOR B-10



LAB NO:202880.03

07/06/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #CT0270

COLLECTED BY: Client

DATE COL'D:06/29/00 RECEIVED:06/29/00

SAMPLE: Water sample, ECM-TW11-1-05, 1348

ANALYTICAL PARAME	ETERS		ANALYTICAL PARAMI	ETERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1.1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L	<1
1.1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1.2 Dichloroethene	ug/L	<1	Trichlorofluomethane	ug/L	<1
Chioroform	ug/L	<1	Dichiordifluomethane	ug/L	<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene	ug/L	<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride	ug/L	<1			
Bromodichioromethane	ug/L	<1			
1,2 Dichloropropane	ug/L	<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone	ug/L	<10			
2-Hexanone	ug/L	<10			
Tetrachioroethene	ug/L	<1			
Toluene	ug/L	<1	•		
1122Tetrachloroethan	ug/L	<1		•	
Chlorobenzene	ug/L	<1			
			•		

cc:

REMARKS:



LAB NO:202880.04

07/06/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NVIRP, Calverton Site, #CT0270

DATE COL'D:06/29/00 RECEIVED:06/29/00 COLLECTED BY: Client

SAMPLE: Water sample, ECM-TW11-2-20, 1435

ANALYTICAL PARAMI	ETERS		ANALYTICAL PARAM	ETERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chioroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L	<1
1,1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane	ug/L	<1
Chioroform	ug/L	<1	Dichlordifluomethane	ug/L	<1
1,2 Dichioroethane	ug/L	<1	c-1,3Dichloropropene	ug/L	<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachioride	ug/L	<1			
Bromodichloromethane	ug/L	<1			
1,2 Dichloropropane	ug/L	<1	•		
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methy1-2-Pentanone	ug/L	<10			
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1			•
1122Tetrachloroethan	ug/L	<1			
Chiorobenzene	ug/L	<1			

cc:

REMARKS:



LAB NO:203192.01

07/25/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr. Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #7398

COLLECTED BY: Client

DATE COL'D:07/17/00 RECEIVED:07/19/00

SAMPLE: Water sample, ECM-TW12-01-35, 0940

L PARAMETERS		ANALYTICAL PARAME	TERS	
	<1	Ethyl Benzene	ug/L	<1
	<1	Styrene	ug/L	<1
	<1	o Xylene	ug/L	<1
		m + p Xylene	ug/L	<2
		Xylene	ug/L	<3
		Bromomethane	ug/L	<1
		ter.ButylMethylEther	ug/L	<1
		Freon 113	ug/L	<1
				<1
		Dichlordifluomethane	ug/L	<1
		c-1,3Dichloropropene	ug/L	<1
		t-1,3Dichloropropene	ug/L	<1
				<1
 * .				
		•		
hene ug/L	<1			
ug/L				
roethan ug/L	<1			
u g/ L	<1			
	e ug/L ug/L oride ug/L ide ug/L thene ug/L thane ug/L thane ug/L thane ug/L ethane ug/L methane ug/L methane ug/L ug/L ntanone ug/L ug/L oroethan ug/L	ug/L <1	ug/L <1	ug/L 1

cc:

REMARKS:



LAB NO:203192.02

07/25/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #7398

COLLECTED BY: Client DATE COL'D:07/17/00 RECEIVED:07/19/00

SAMPLE: Water sample, ECM-TW12-02-50, 1035

ANALYTICAL PARAMI	ETERS			ANALYTICAL PARAMI	ETERS	
Chloromethane	ug/L	<1		Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1		Styrene	ug/L	<1
Chloroethane	ug/L	<1		o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1		m + p Xylene	ug/L	<2
Acetone	ug/L	<10		Xylene	ug/L	<3
Carbon disulfide	ug/L	<1		Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1		ter.ButylMethylEther		<1
1,1 Dichloroethane	ug/L	<1		Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1		Trichlorofluomethane		<1
Chloroform	ug/L	<1		Dichlordifluomethane		<1
1.2 Dichloroethane	ug/L	<1		c-1,3Dichloropropene		<1
2-Butanone	ug/L	<10		t-1,3Dichloropropene		<1
111 Trichloroethane	ug/L	<1		Trichloroethene	ug/L	<1
Carbon Tetrachloride		<1				
Bromodichloromethane		<1				
1,2 Dichloropropane	ug/L	<1		·		
112 Trichloroethane	ug/L	<1				
Benzene	ug/L	<1				
Bromoform	ug/L	<1				
4-Methy1-2-Pentanone		<10				
2-Hexanone	ug/L	<10				
Tetrachloroethene	ug/L	<1				
Toluene	ug/L	<1				
1122Tetrachloroethan		<1				
Chlorobenzene	ug/L	<1	*	•		

cc:

REMARKS:



LAB NO:203192.03

07/25/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr. Pittsburgh, PA 15220-2745

ATTN: David Brayack

PO#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #7398

COLLECTED BY: Client

DATE COL'D:07/17/00 RECEIVED:07/19/00

SAMPLE: Water sample, ECM-TW13-01-35, 1346

ANALYTICAL PARAMETERS				ANALYTICAL PARAMETERS		
	Chloromethane	ug/L	<1	Ethyl Benzene	ug/L <1	
		ug/L	<1	Styrene	ug/L <1	
		ug/L	<1	o Xylene	ug/L <1	
	Methylene Chloride	ug/L	<1	m + p Xylene	ug/L <2	
	Acetone	ug/L	<10	Xylene	ug/L <3	
	Carbon disulfide	ug/L	<1	Bromomethane	ug/L < 1	
	1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L <1	
		ug/L	<1	Freon 113	ug/L <1	
	1.2 Dichloroethene	ug/L	<1	Trichlorofluomethane		
	Chloroform	ug/L	<1	Dichlordifluomethane		
		ug/L	<1	c-1,3Dichloropropene	ug/L <1	
	2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L <1	
	111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L <1	
	Carbon Tetrachloride	ug/L	<1			
	Bromodichloromethane	ug/L	<1			
	1,2 Dichloropropane		<1			
	112 Trichloroethane	ug/L	<1			
	Benzene	ug/L	<1			
	Bromoform	ug/L	<1			
	4-Methy1-2-Pentanone		<10			
	2-Hexanone	ug/L	<10			
•	Tetrachloroethene	ug/L	<1			
	Toluene	ug/L	<1 .			
	1122Tetrachloroethan		<1			
	Chlorobenzene	ug/L	<1	•		

cc:

REMARKS:



LAB NO:203192.04

07/25/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr. Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #7398

COLLECTED BY: Client

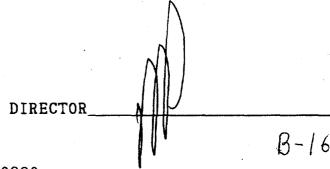
DATE COL'D:07/17/00 RECEIVED:07/19/00

SAMPLE: Water sample, ECM-TW13-02-50, 1435

ANALYTICAL PARAMI	ETERS	•	ANALYTICAL PARAMI	ETERS	
Chloromethane	ug/L	<1 -	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
.1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther		<1
1,1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane	ug/L	<1
Chloroform	ug/L	<1	Dichlordifluomethane	ug/L	<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene	ug/L	<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride	ug/L	<1	·		
Bromodichloromethane	ug/L	<1			
1,2 Dichloropropane	ug/L	<1			
112 Trichloroethane	ug/L	<1			•
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone	ug/L	<10			
2-Hexanone	ug/L	<10			
	ug/L .	<1			
Toluene	ug/L	<1			
1122Tetrachloroethan	ug/L	<1			
Chlorobenzene	ug/L	<1			

cc:

REMARKS:





LAB NO:203192.08

07/25/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #7398

COLLECTED BY: Client

DATE COL'D:07/18/00 RECEIVED:07/19/00

SAMPLE: Water sample, ECM-TW14-01-49, 1245

ANALYTICAL PARAME	ETERS		ANALYTICAL PARAMI	ETERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther		<1
1,1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane	_	<1
Chloroform	ug/L	<1	Dichlordifluomethane		<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene		<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride	ug/L	<1		•	
Bromodichloromethane		<1			
1,2 Dichloropropane		<1			
112 Trichloroethane		<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone		<10			
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1			
1122Tetrachloroethan		<1			
Chlorobenzene	ug/L	<1			

cc:

REMARKS:



LAB NO:203192.09

07/25/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr. Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #7398

COLLECTED BY: Client DATE COL'D:07/18/00 RECEIVED:07/19/00

SAMPLE: Water sample, ECM-TW14-02-64, 1325

ANALYTICAL PARAME	ETERS		ANALYTICAL PARAMI	ETERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L	<1
1,1 Dichloroethane	ug/L	<1 .	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane		<1
Chloroform	ug/L	<1	Dichlordifluomethane		<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene		<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene		<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride	ug/L	<1			
Bromodichloromethane		<1			
1,2 Dichloropropane	ug/L	<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone		<10		·	
2-Hexanone	ug/L	<10	•		
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1			
1122Tetrachloroethan		<1			
Chlorobenzene	ug/L	<1			

cc:

REMARKS:





LAB NO:203192.05

07/25/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #7398

COLLECTED BY: Client

DATE COL'D:07/18/00 RECEIVED:07/19/00

SAMPLE: Water sample, ECM-TW15-01-42, 0905

ANALYTICAL PARAME	TERS		ANALYTICAL PARAMETE	
Chloromethane	ug/L	<1		3/L <1
Vinyl Chloride	ug/L	<1		3/L <1
Chloroethane	ug/L	<1	o Xylene ug	g/L <1
Methylene Chloride	ug/L	<1		3/L <2
Acetone	ug/L	<10		3/L <3
Carbon disulfide	ug/L	<1	Bromomethane ug	g/L <1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther ug	
1,1 Dichloroethane	ug/L	<1		g/L <1
1,2 Dichloroethene	ug/L	<1		3/L <1
Chloroform	ug/L	<1	Dichlordifluomethane ug	
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene ug	
2-Butanone	ug/L	<10	t-1,3Dichloropropene ug	
111 Trichloroethane	ug/L	<1	Trichloroethene ug	g/L <1
Carbon Tetrachloride		<1		
Bromodichloromethane		<1		
1,2 Dichloropropane	ug/L	<1		
112 Trichloroethane	ug/L	<1	·	
Benzene	ug/L	<1		
Bromoform	ug/L	<1		
4-Methyl-2-Pentanone		<10		
2-Hexanone	ug/L	<10	•	
Tetrachloroethene	ug/L	<1		
Toluene	ug/L	<1		
1122Tetrachloroethan	_	<1		
Chlorobenzene	ug/L	<1		

cc:

REMARKS:



LAB NO:203192.06

07/25/00

Tetra Tech Nus, Inc. Foster Plaza VII, 661 Anderson Dr. Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #7398

COLLECTED BY: Client

DATE COL'D:07/18/00 RECEIVED:07/19/00

SAMPLE: Water sample, ECM-TW15-02-57, 0955

ANALYTICAL PARAM	ETERS		ANALYTICAL PARAM	ETERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L	<1
1,1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane		<1
Chloroform	ug/L	<1	Dichlordifluomethane	ug/L	<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene		<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride		<1	(x,y) = (x,y) + (x,y		
Bromodichloromethane	ug/L	<1			
1,2 Dichloropropane		<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone		<10		•	
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1			
	ug/L	<1			
1122Tetrachloroethan		<1			
Chlorobenzene	u g/ L	<1			

cc:

REMARKS:

DIRECTOR

18665

NYSDOH ID# 10320



LAB NO:203192.07

07/25/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr. Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #7398

COLLECTED BY: Client

DATE COL'D:07/18/00 RECEIVED:07/19/00

SAMPLE: Water sample, ECM-TW15-03-00, 1006

ANALYTICAL PARAME	TERS		ANALYTICAL PARAM		
	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther		<1
1,1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane		<1
Chloroform	ug/L	<1	Dichlordifluomethane		<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene		<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene		<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride	ug/L	<1			
Bromodichloromethane		<1			
1,2 Dichloropropane		<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	u g/ L	<1			
4-Methyl-2-Pentanone		<10			
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1			
	ug/L	<1 .			
1122Tetrachloroethan		<1			
Chlorobenzene	ug/L	<1			

cc:

REMARKS:

DIRECTOR B-21



LAB NO:203659.06

08/18/00

Tetra Tech Nus, Inc. Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #3853

DATE COL'D:08/11/00 RECEIVED:08/11/00 COLLECTED BY: Client

SAMPLE: Water sample, ECM-TW20-45-01, 0930

ANALYTICAL PARAMI	ETERS		ANALYTICAL PARAMI	ETERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L	<1
1,1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane	ug/L	<1
Chloroform	ug/L	<1	Dichlordifluomethane		<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene		<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride	ug/L	<1			
Bromodichloromethane	ug/L	<1			
1,2 Dichloropropane	ug/L	<1			
112 Trichloroethane	ug/L	<1	·		
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone		<10			
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1			
1122Tetrachloroethan	ug/L	<1		•	
Chlorobenzene	ug/L	<1			

cc:

REMARKS:

NYSDOH ID# 10320



LAB NO:203659.07

08/18/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #3853

COLLECTED BY: Client

DATE COL'D:08/11/00 RECEIVED:08/11/00

SAMPLE: Water sample, ECM-TW20-60-01, 1020

ANALYTICAL PARAME	ETERS		ANALYTICAL PARAMI	ETERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L	<1
1,1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane	ug/L	<1
Chloroform	ug/L	<1	Dichlordifluomethane	ug/L	<1
1.2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene	ug/L	· <1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride	ug/L	<1			
Bromodichloromethane	ug/L	<1			
1,2 Dichloropropane	ug/L	<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methy1-2-Pentanone	ug/L	<10			
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1			
1122Tetrachloroethan		<1			
Chlorobenzene	ug/L	<1			

cc:

REMARKS:



LAB NO:203659.08

08/18/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr. Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #3853

COLLECTED BY: Client DATE COL'D:08/11/00 RECEIVED:08/11/00

SAMPLE: Water sample, ECM-TW20-80-01, 1122

ANALYTICAL PARAME	ETERS		ANALYTICAL PARAMET	ERS	
Chloromethane	ug/L	<1	Ethyl Benzene u	ig/L <	1
Vinyl Chloride	ug/L	<1	Styrene	ig/L <	1
Chloroethane	ug/L	<1		1g/L <	
Methylene Chloride	ug/L	<1	m + p Xylene v	ig/L <	
Acetone	ug/L	<10	Xylene	1g/L <	
Carbon disulfide	ug/L	<1	Bromomethane u	1 g/L < :	1
1.1 Dichloroethene	ug/L	<1	ter.ButylMethylEther u		
1.1 Dichloroethane	ug/L	<1	Freon 113	1g/L <	
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane u		
Chloroform	ug/L	<1	Dichlordifluomethane u		
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene u		
2-Butanone	ug/L	<10	t-1,3Dichloropropene u		
111 Trichloroethane	ug/L	2	Trichloroethene ι	1g/L <	1
Carbon Tetrachloride	ug/L	<1			
Bromodichloromethane	ug/L	<1			
1,2 Dichloropropane	ug/L	<1	$\mathbf{r}_{i} = \mathbf{r}_{i} + \mathbf{r}_{i}$		
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone	ug/L	<10			
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1			
1122Tetrachloroethan		<1			
Chlorobenzene	ug/L	<1			

cc:

REMARKS:



LAB NO:203659.09

08/18/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #3853

COLLECTED BY: Client

DATE COL'D:08/11/00 RECEIVED:08/11/00

SAMPLE: Water sample, ECM-TW20-100-01, 1235

ANALYTICAL PARAME	ETERS		ANALYTICAL PARAMETERS	
Chloromethane	ug/L	<1	Ethyl Benzene ug/L	. <1
Vinyl Chloride	ug/L	<1	Styrene ug/L	<1
Chloroethane	ug/L	<1	o Xylene ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene ug/L	<2
Acetone	ug/L	18	Xylene ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther ug/L	<1
1,1 Dichloroethane	ug/L	<1	Freon 113 ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane ug/L	<1
Chloroform	ug/L	<1	Dichlordifluomethane ug/L	<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene ug/L	<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene ug/L	<1
Carbon Tetrachloride		<1		
Bromodichloromethane		<1	·	
1,2 Dichloropropane	ug/L	<1	•	
112 Trichloroethane	ug/L	<1	•	
Benzene	ug/L	<1		
Bromoform	ug/L	<1		
4-Methy1-2-Pentanone		<10		
2-Hexanone	ug/L	<10		
Tetrachloroethene	ug/L	<1		
Toluene	ug/L	<1		
1122Tetrachloroethan		<1		
Chlorobenzene	ug/L	<1		

cc:

REMARKS:



LAB NO:203659.10

08/18/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #3853

COLLECTED BY: Client DATE COL'D:08/11/00 RECEIVED:08/11/00

SAMPLE: Water sample, ECM-TW20-120-01, 1340

ANALYTICAL PARAMI	ETERS		ANALYTICAL PARAM	ETERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	7	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther		<1
1,1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane		<1
Chloroform	ug/L	<1	Dichlordifluomethane		<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene		<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene		<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride		<1			
Bromodichloromethane		<1			
1,2 Dichloropropane		<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone		<10			
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1			
1122Tetrachloroethan		<1			
Chlorobenzene	ug/L	<1	•		

cc:

REMARKS:

ECO EST LABORATORIES, INC.

377 SHEFFIELD AVE. • N. BABYLON, N.Y. 11703 • (631) 422-5777• FAX (631) 422-5770

LAB NO:203697.01

08/21/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #3853

COLLECTED BY: Client DATE COL'D:08/14/00 RECEIVED:08/15/00

SAMPLE: Water sample, ECM-TW21-45-01, 1115

	ANALYTICAL PARAME	ETERS		ANALYTICAL PARAMI	ETERS	
	Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
	Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
	Chloroethane	ug/L	<1	o Xylene	ug/L	<1
	Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
	Acetone	ug/L	<10	Xylene	ug/L	<3
	Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
	1.1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L	<1
		ug/L	<1	Freon 113	ug/L	<1
		ug/L	<1	Trichlorofluomethane	ug/L	<1
	Chloroform	ug/L	<1	Dichlordifluomethane	ug/L	<1
	1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene	ug/L	<1
		ug/L	<10	t-1,3Dichloropropene	ug/L	<1
	111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
	Carbon Tetrachloride	ug/L	<1			
	Bromodichloromethane	ug/L	<1			
	1,2 Dichloropropane	ug/L	<1			
	112 Trichloroethane	ug/L	<1			
	Benzene	ug/L	<1			
	Bromoform	ug/L	<1			
	4-Methy1-2-Pentanone		<10			
	2-Hexanone	ug/L	<10			
	Tetrachloroethene	ug/L	<1			
•	Toluene	ug/L	<1		•	
	1122Tetrachloroethan		<1	·		
	Chlorobenzene	ug/L	<1			
	•					

cc:

REMARKS:

NYSDOH ID# 10320



LAB NO:203697.02

08/21/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #3853

COLLECTED BY: Client DATE COL'D:08/14/00 RECEIVED:08/15/00

SAMPLE: Water sample, ECM-TW21-60-01, 1225

ANALYTICAL PARAME	ETERS		ANALYTICAL PARAMI	ETERS	
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther		<1
1,1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane		<1
Chloroform	ug/L	<1	Dichlordifluomethane	- ' .	<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene		<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene		<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride		<1			
Bromodichloromethane		<1			
	ug/L	<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone		<10			
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1	·		
1122Tetrachloroethan		<1			
Chlorobenzene	ug/L	<1			

cc:

REMARKS:



LAB NO:203697.03

08/21/00

Tetra Tech Nus, Inc.

Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #3853

COLLECTED BY: Client

DATE COL'D:08/14/00 RECEIVED:08/15/00

SAMPLE: Water sample, ECM-TW21-80-01, 1440

ANALYTICAL PARAME	ETERS		ANALYTICAL PARAME	ETERS	
Chloromethane	ug/L	<1 ·	Ethyl Benzene	ug/L	<1
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1
Chloroethane	ug/L	<1	o Xylene	ug/L	<1
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2
Acetone	ug/L	<10	Xylene	ug/L	<3
Carbon disulfide	ug/L	<1	Bromomethane	ug/L	<1
-1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L	<1
1,1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane		<1
Chloroform	ug/L	<1	Dichlordifluomethane		<1
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene		<1
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1
Carbon Tetrachloride	ug/L	<1	·		
Bromodichloromethane		<1			
1,2 Dichloropropane	ug/L	<1			
112 Trichloroethane	ug/L	<1			
Benzene	ug/L	<1			
Bromoform	ug/L	<1			
4-Methyl-2-Pentanone		<10			
2-Hexanone	ug/L	<10			
Tetrachloroethene	ug/L	<1			
Toluene	ug/L	<1			
1122Tetrachloroethan	-	<1			
Chlorobenzene	ug/L	<1			

cc:

REMARKS:

DIRECTOR $\beta-2$



LAB NO:203697.04

08/21/00

Tetra Tech Nus, Inc. Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #3853

COLLECTED BY: Client

DATE COL'D:08/14/00 RECEIVED:08/15/00

SAMPLE: Water sample, ECM-TW21-100-01, 1545

ANALYTICAL PARAMETERS			ANALYTICAL PARAMETERS	ANALYTICAL PARAMETERS		
Chloromethane	ug/L	<1	Ethyl Benzene ug/L	<1		
Vinyl Chloride	ug/L	<1	Styrene ug/L	<1		
Chloroethane	ug/L	<1		<1		
Methylene Chloride	ug/L	<1		<2		
Acetone	ug/L	<10		<3		
Carbon disulfide	ug/L	<1	<u></u>	<1		
1,1 Dichloroethene	ug/L	<1		<1		
1,1 Dichloroethane	ug/L	<1		<1		
1,2 Dichloroethene	ug/L	<1		<1		
Chloroform	ug/L	<1		<1		
1,2 Dichloroethane	ug/L	<1		<1		
2-Butanone	ug/L	<10		<1		
111 Trichloroethane	ug/L	<1	Trichloroethene ug/L	<1		
Carbon Tetrachloride		<1				
Bromodichloromethane		<1				
1,2 Dichloropropane	ug/L	<1				
112 Trichloroethane	ug/L	<1				
Benzene	ug/L	<1				
Bromoform	ug/L	<1				
4-Methyl-2-Pentanone		<10				
2-Hexanone	ug/L	<10	•			
Tetrachloroethene	ug/L	<1				
Toluene	ug/L	<1				
1122Tetrachloroethan		<1				
Chlorobenzene	ug/L	<1				

cc:

REMARKS:



LAB NO:203697.05

08/21/00

Tetra Tech Nus, Inc. Foster Plaza VII, 661 Anderson Dr.

Pittsburgh, PA 15220-2745

ATTN: David Brayack

P0#00-0504-DB

SOURCE OF SAMPLE: NWIRP, Calverton Site, #3853

COLLECTED BY: Client

DATE COL'D:08/15/00 RECEIVED:08/15/00

SAMPLE: Water sample, ECM-TW21-130-01, 0925

ANALYTICAL PARAMETERS			ANALYTICAL PARAME	ANALYTICAL PARAMETERS		
Chloromethane	ug/L	<1	Ethyl Benzene	ug/L	<1	
Vinyl Chloride	ug/L	<1	Styrene	ug/L	<1	
Chloroethane	ug/L	<1	o Xylene	ug/L	<1	
Methylene Chloride	ug/L	<1	m + p Xylene	ug/L	<2	
Acetone	ug/L	<10	Xylene	ug/L	<3	
Carbon disulfide	ug/L	<1	${ t Bromomethane}$	ug/L	<1	
1,1 Dichloroethene	ug/L	<1	ter.ButylMethylEther	ug/L	<1	
1,1 Dichloroethane	ug/L	<1	Freon 113	ug/L	<1	
1,2 Dichloroethene	ug/L	<1	Trichlorofluomethane	ug/L	<1	
Chloroform	ug/L	<1	Dichlordifluomethane	ug/L	<1	
1,2 Dichloroethane	ug/L	<1	c-1,3Dichloropropene		<1	
2-Butanone	ug/L	<10	t-1,3Dichloropropene	ug/L	<1	
111 Trichloroethane	ug/L	<1	Trichloroethene	ug/L	<1	
Carbon Tetrachloride	ug/L	<1	·			
Bromodichloromethane	ug/L	<1				
1,2 Dichloropropane	ug/L	<1				
112 Trichloroethane	ug/L	<1				
Benzene	ug/L	<1				
Bromoform	ug/L	<1				
4-Methyl-2-Pentanone		<10				
2-Hexanone	ug/L	<10	•			
Tetrachloroethene	ug/L	<1				
Toluene	ug/L	<1				
1122Tetrachloroethan		<1				
Chlorobenzene	ug/L	<1				

cc:

REMARKS: